

**Iowa Department of Natural Resources  
Title V Operating Permit**

**Name of Permitted Facility: Cargill Inc. – Sioux City**  
**Facility Location: 1016 Clark Street, Sioux City, IA 51102**  
**Air Quality Operating Permit Number: 99-TV-013R2**  
**Expiration Date: June 08, 2014**  
**Permit Renewal Application Deadline: December 08, 2013**

**EIQ Number: 92-0769**  
**Facility File Number: 97-01-001**

---

**Responsible Official**

**Name: Brian Spencer**  
**Title: Facility Superintendent**  
**Mailing Address: 1016 Clark Street, Sioux City, IA 51102**  
**Phone #: (712)279-1232**

**Permit Contact Person for the Facility**

**Name: Brian Spencer**  
**Title: Facility Superintendent**  
**Mailing Address: 1016 Clark Street, Sioux City, IA 51102**  
**Phone #: (712)279-1232**

---

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

**For the Director of the Department of Natural Resources**

---

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

# Table of Contents

<b>I. Facility Description and Equipment List .....</b>	<b>5</b>
<b>II. Plant - Wide Conditions.....</b>	<b>7</b>
<b>III. Emission Point Specific Conditions .....</b>	<b>11</b>
<b>IV. General Conditions.....</b>	<b>95</b>
G1. Duty to Comply	
G2. Permit Expiration	
G3. Certification Requirement for Title V Related Documents	
G4. Annual Compliance Certification	
G5. Semi-Annual Monitoring Report	
G6. Annual Fee	
G7. Inspection of Premises, Records, Equipment, Methods and Discharges	
G8. Duty to Provide Information	
G9. General Maintenance and Repair Duties	
G10. Recordkeeping Requirements for Compliance Monitoring	
G11. Evidence used in establishing that a violation has or is occurring.	
G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification	
G13. Hazardous Release	
G14. Excess Emissions and Excess Emissions Reporting Requirements	
G15. Permit Deviation Reporting Requirements	
G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations	
G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification	
G18. Duty to Modify a Title V Permit	
G19. Duty to Obtain Construction Permits	
G20. Asbestos	
G21. Open Burning	
G22. Acid Rain (Title IV) Emissions Allowances	
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements	
G24. Permit Reopenings	
G25. Permit Shield	
G26. Severability	
G27. Property Rights	
G28. Transferability	
G29. Disclaimer	
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification	
G31. Prevention of Air Pollution Emergency Episodes	
G32. Contacts List	

**V. Appendices: .....109**

- A. 40 CFR Part 60 Subpart A – General Provisions
- B. 40 CFR Part 60 Subpart Db –Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units
- C. 40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial, Commercial, and Institutional Steam Generating Unit
- D. 40 CFR Part 60 Subpart DD – Standards of Performance for Grain Elevators
- E. 40 CFR Part 63 Subpart A – General Provisions
- F. 40 CFR Part 63 Subpart GGGG – National Emission Standard for Hazardous Air Pollutants: Solvent Extractions for Vegetable Oil Production
- G. Quality Assurance/Quality Control (QA/QC) for PEM
- H. Consent Decree 05-2037JMR/FLN

## Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE .....	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP .....	emission point
EU .....	emission unit
gr./dscf .....	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS.....	new source performance standard
NESHAP .....	National Emission Standards for Hazardous Air Pollutants
ppmv .....	parts per million by volume
lb./hr .....	pounds per hour
lb./MMBtu .....	pounds per million British thermal units
SCC .....	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC .....	Standard Industrial Classification
TPY .....	tons per year
USEPA.....	United States Environmental Protection Agency

### Pollutants

PM.....	particulate matter
PM <sub>10</sub> .....	particulate matter ten microns or less in diameter
SO <sub>2</sub> .....	sulfur dioxide
NO <sub>x</sub> .....	nitrogen oxides
VOC .....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: Cargill Inc. – Sioux City

Permit Number: 99-TV-013R2

Facility Description: Soybean Processing Plant (SIC 2075)

## Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP-01	EU-01.01	Conveyance	95-A-323-S9
	EU-01.02	Grain Cleaner	
	EU-01.03	Grinder	
EP-02	EU-02.01	Conveyors	95-A-324-S8
	EU-02.02	Cracking and Dehulling	
EP-04	EU-04.01	Hull Grinder Bag Filter	95-A-325-S5
EP-05	EU-05.01	Drying	95-A-326-S4
	EU-05.02	Cooling	
	EU-05.03	Conveying	
EP-05A	EU-05A.01	Meal Dryer/Cooler Deck #1	98-A-400-S2
EP-06	EU-06.01	Grinders	95-A-327-S4
	EU-06.02	Drag Conveyor	
	EU-06.03	Sifters	
EP-07	EU-07.01	Conveying	95-A-328-S4
	EU-07.02	Sifter	
	EU-07.03	Grinder	
EP-08	EU-08.01	Rail Loadout	95-A-329-S5
	EU-08.02	Truck Loadout	
	EU-08.03	Transfer Conveyor	
	EU-08.04	Soybean CoProduct Loadout	
EP-09	EU-09.01	Clay Storage	95-A-330
EP-10	EU-10.01	Clay Handling	95-A-331
EP-11	EU-11.01	Conveying	95-A-332-S5
	EU-11.02	East Grain Cleaner	
EP-13	EU-13.01	Flaking	95-A-334-S6
	EU-13.02	Conveying	
EP-13A	EU-13A.01	Flaking	98-A-401-S3
	EU-13A.02	Conveying	
EP-15	EU-15.01	Hull Transfer Storage	95-A-336-S4
EP-16	EU-16.01	Extraction Process	95-A-337-S7
EP-17	EU-17.01	Package Boiler	86-A-036-S5
EP-19	EU-19.01	Reformer	95-A-339
EP-20	EU-20.01	Pellet Transfer	98-A-402-S3
EP-21	EU-21.01	Drying	95-A-340-S4

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>IDNR Construction Permit Number</b>
	EU-21.02	In Process Natural Gas Usage	
EP-22	EU-22.01	Drying	98-A-403-S3
	EU-22.02	In Process Natural Gas Usage	
EP-23	EU-23.01	Reconditioned Boiler - Natural Gas	95-A-341-S6
	EU-23.02	Reconditioned Boiler - Fuel Oil	
	EU-23.03	Reconditioned Boiler - Vegetable Oil	
EP-23.2	EU-23.21	Boiler #3 Heat Recovery Stack - Natural Gas	07-A-989
	EU-23.22	Boiler #3 Heat Recovery Stack - Fuel Oil	
	EU-23.23	Boiler #3 Heat Recovery Stack - Vegetable Oil	
EP-25	EU-25.01	Storage Tank Aspiration	94-A-507
EP-26	EU-26.01	Truck Dump	96-A-1253-S4
	EU-26.02	Truck Conveyor and Legs	
EP-27	EU-27.01	Bean Conditioner	98-A-404-S3
EP-28	EU-28.01	Pellet Cooler	98-A-405-S4
EP-29	EU-29.01	GTX Refinery Boiler	99-A-677
EP-30	EU-30	Meal Flow Additive Tank	02-A-282-S1
EP-31	EU-31	Soybean CoProduct System Aspiration	02-A-554-S1
EP-32	EU-32	Soybean CoProduct L/O System	02-A-555-S1
EP-33	EU-33	Vegetable Oil Refinery	03-A-028-S1

---

### **Insignificant Activities Equipment List**

---

<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
SS#1	North Primary Dehulling
SS#2	South Primary Dehulling
SS#3	Soybean Storage Tank

## II. Plant-Wide Conditions

Facility Name: Cargill Inc. – Sioux City  
Permit Number: 99-TV-013R2

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

---

### Permit Duration

The term of this permit is: Five years from permit issuance  
Commencing on: June 09, 2009  
Ending on: June 08, 2014

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

---

### Emission Limits

*Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:*

Opacity (visible emissions): 40% opacity  
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO<sub>2</sub>): 500 parts per million by volume  
Authority for Requirement: 567 IAC 23.3(3)"e"

#### Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).  
Authority for Requirement: 567 IAC 23.3(2)"a"

**Fugitive Dust:** Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

---

### ***Compliance Plan***

*The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.*

Unless otherwise noted in Section III of this permit, Cargill Inc. – Sioux City is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Cargill Inc. – Sioux City shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

---

### **Consent Decree**

On March 3, 2006, the Federal District Court in Minnesota entered a Consent Decree between Cargill, Incorporated, U.S. EPA, Iowa Department of Natural Resources and other participating agencies. U.S. et al v. Cargill, Incorporated Civil Action Number 05-2037JMR/FLN. This Consent Decree is hereby incorporated in its entirety into this permit. During the effective period of the Consent Decree, Cargill shall comply with the specific emission reduction requirements, emission limits, operating parameters, monitoring requirements, recordkeeping requirements, and any other applicable requirements specified in the Consent Decree and applicable to this facility. Where a conflict exists, these requirements shall supersede and control over corresponding terms and conditions of this permit. A copy of this Consent Decree is included as Appendix H of this permit.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN  
567 IAC 22.108(1)

### **40 CFR 60 Subpart A Requirements**

This facility is subject to 40 CFR 60 Subpart A – General Provisions. The affected emission points include EP-01, EP-02, EP-11, EP-17, EP-21, EP-22, EP-23, EP-23.2, and EP-26. See Appendix for the complete text of the Standard.

Authority for Requirements: 40 CFR 60 Subpart A  
567 IAC 23.1(2)

### **40 CFR Part 60 Subpart Db Requirements**

This facility is subject to 40 CFR Part 60 Subpart Db – Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units. The affected emission points include EP-23 and EP-23.2.

See Appendix for the complete text of the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart Db  
567 IAC 23.1(2) "ccc"

### **40 CFR Part 60 Subpart Dc Requirements**

This facility is subject to 40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial, Commercial, and Institutional Steam Generating Unit. The affected emission point includes EP-17.

See Appendix for the complete text of the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart Dc  
567 IAC 23.1(2) "III"

### **40 CFR 60 Subpart DD Requirements**

This facility is subject to 40 CFR 60 Subpart DD – Standards of Performance for Grain Elevators. The affected emission points include EP-01, EP-02, EP-11, EP-21, EP-22 and EP-26.

See Appendix for the complete text of the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart DD  
567 IAC 23.1(2) "ooo"

#### **40 CFR Part 63 Subpart A Requirements**

This facility is subject to 40 CFR Part 63 Subpart A – General Provisions. The affected emission points include EP-16, and EP-33.

See Appendix for the complete text of the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 63 Subpart A  
567 IAC 23.1(4) "a"

#### **40 CFR Part 63 Subpart GGGG Requirements**

This facility is subject to 40 CFR Part 63 Subpart GGGG – National Emission Standard for Hazardous Air Pollutants: Solvent Extractions for Vegetable Oil Production. The affected emission points include EP-16, and EP-33.

See Appendix for the complete text of the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 63 Subpart GGGG  
567 IAC 23.1(3) "cg"

#### **Section 112(j) of the Clean Air Act (MACT Hammer) Compliance Plan**

EP-17, EP-23, and EP-23.2 are of the source type regulated by the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters (567 IAC 23.1(4)"dd", 40 CFR Part 63, Subpart DDDDD). On July 30, 2007, the DC Circuit Court vacated this entire standard. Since the standard has been vacated, the units may be subject to the requirements of section 112(j) of the Clean Air Act. Section 112(j) requires the facility to submit an application addressing the control of HAP emissions from these units and also requires that the MACT (Maximum Achievable Control Technology) be incorporated into the facility's Title V operating permit. The DNR is not requiring affected facilities to submit 112(j) applications at this time. However, the DNR recommends that affected facilities submit the minimum information to satisfy 112(j) application requirements. The DNR is suggesting submittal of this information by January 31, 2009, because this date is 18 months from the date the D.C. Court issued its mandate. (Refer to the Air Quality Bureau letter dated December 31, 2008 for additional detail.)

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

### III. Emission Point-Specific Conditions

Facility Name: Cargill Inc. – Sioux City  
 Permit Number: **99-TV-013R2**

#### Emission Point ID Number: EP-01

##### Associated Equipment

Associated Emission Unit ID Numbers: EU-01.1, EU-01. 2, EU-01.3  
 Emissions Control Equipment ID Number: CE-01  
 Emissions Control Equipment Description: Bagfilter

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-01	EU-01.1	Conveyance	Soybeans	243 tons/yr
	EU-01.2	Grain Cleaner		243 tons/yr
	EU-01.3	Grinder		243 tons/yr

#### Applicable Requirements

##### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from this emission point shall not exceed the levels specified below.*

##### **PSD Emission Limits**

Pollutant	Limit	Reference
Opacity	0% <sup>(1)</sup>	Iowa DNR Construction Permit 95-A-323-S9
Particulate Matter (PM <sub>10</sub> )	0.0039 gr/dscf; 0.60 lb/hr	Iowa DNR Construction Permit 95-A-323-S9
Particulate Matter (PM)	0.0046 gr/dscf; 0.72 lb/hr	Iowa DNR Construction Permit 95-A-323-S9

<sup>(1)</sup>Standard is expressed as a six-minute average.

##### **NSPS and NESHAP Emission Limits**

Pollutant	Limit	Reference
Opacity	0% <sup>(2)</sup>	Iowa DNR Construction Permit 95-A-323-S9 40 CFR 60 Subpart DD 567 IAC 23.1 (2) "ooo"
Particulate Matter (PM)	0.01 gr/dscf	Iowa DNR Construction Permit 95-A-323-S9 40 CFR 60 Subpart DD 567 IAC 23.1 (2) "ooo"

<sup>(2)</sup>Standard is expressed as a six-minute average and applies at all times except during periods of startup, shutdown and malfunction.

**Other Emission Limits**

<b>Pollutant</b>	<b>Limit</b>	<b>Reference</b>
Opacity	40%	Iowa DNR Construction Permit 95-A-323-S9 567 IAC 23.3(2) "d"
Particulate Matter (PM <sub>10</sub> )	0.0033 gr/dscf; 0.60 lb/hr	Iowa DNR Construction Permit 95-A-323-S9
Particulate Matter (PM)	0.004 gr/dscf; 0.1 gr/dscf	Iowa DNR Construction Permit 95-A-323-S9 567 IAC 23.4(7)

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Operating limits are not required at this time.

**NSPS and NESHAP Applicability**

This emission point is subject to NSPS Subpart A – General Provisions and Subpart DD – Standards of Performance for Grain Elevators.

Authority for Requirement: Iowa DNR Construction Permit 95-A-323-S9

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 40.5

Stack Opening, (inches, dia.): 22

Exhaust Flow Rate (scfm): 21,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-323-S9

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the wner/operator must notify the Department and obtain a permit amendment, if required.

The following emission units exhaust through this emission point:

<b>Emission Unit</b>	<b>Control Equipment</b>	<b>Maximum Capacity</b>
West Grain Cleaner (EU-1.02)	Bag Filter (CE-01)	8,100 bushels per hour
Grinder (EU-1.03)	Bag Filter (CE-01)	8,100 bushels per hour
Conveyor Belts (EU-1.01)	Bag Filter (CE-01)	8,100 bushels per hour
West Clean Leg Head and Boot		
West Dry Leg Head and Boot		
Tempering Tank Feed Drag		
Overhead Tram Drag Conveyor Head		

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Number: EP-02

### Associated Equipment

Associated Emission Unit ID Numbers: EU-02.1, EU-02.2

Emissions Control Equipment ID Number: CE-02

Emissions Control Equipment Description: Bagfilter

---

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

---

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-02	EU-02.1	Conveyors	Soybeans	1,642,500 tons/yr
	EU-02.2	Cracking and Dehulling		1,642,500 tons/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0% <sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S8  
567 IAC 23.3(2) "d"  
40 CFR 60 Subpart DD  
567 IAC 23.1(2) "ooo"

<sup>(1)</sup>An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.003 gr/dscf <sup>(2)</sup>; 0.76 lb/hr <sup>(2)</sup>

Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S8

<sup>(2)</sup> BACT emission limit based on a 4-hour average.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.006 gr/dscf <sup>(3)</sup>; 1.52 lb/hr <sup>(3)</sup>

Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S8

<sup>(3)</sup> BACT emission limit based on a 4-hour average

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

A. Operate and maintain the control equipment according to good manufacturing practices.

### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

A. Record any maintenance performed on the bagfilter.

Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S8

### **NSPS and NESHAP Applicability**

This emission point is subject to NSPS Subpart A – General Provisions. With the exception of Tank 82, this emission point is also subject to NSPS Subpart DD – Standards of Performance for Grain Elevators.

Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S8

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 62

Stack Opening, (inches, dia.): 26

Exhaust Flow Rate (scfm): 29,500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-324-S8

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-04**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-04.1  
Emissions Control Equipment ID Number: CE-04  
Emissions Control Equipment Description: Bagfilter

---

Emission Unit vented through this Emission Point: EU-04.1  
Emission Unit Description: Hull Grinding  
Raw Material/Fuel: Soybeans  
Rated Capacity: 1,642,500 tons/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 95-A-325-S5  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.002 gr/dscf; 0.137 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-325-S5

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.006 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 95-A-325-S5

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Operating limits are not required at this time.

#### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 36.6

Stack Opening, (inches, dia.): 20

Exhaust Flow Rate (scfm): 8,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 95-A-325-S5

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-05**

Associated Equipment

Associated Emission Unit ID Numbers: EU-05.1, EU-05.2, EU-05.3

Emissions Control Equipment ID Number: CE-05

Emissions Control Equipment Description: Bagfilter

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-05	EU-05.1	Drying	Soybeans	1,642,500 tons/yr
	EU-05.2	Cooling		1,642,500 tons/yr
	EU-05.3	Conveying		1,642,500 tons/yr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 95-A-326-S4  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.005 gr/dscf; 2.9 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-326-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr/dscf; 0.1 gr/dscf; 5.8 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-326-S4  
567 IAC 23.4(7)

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Operating limits are not required at this time.

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 85

Stack Opening, (inches, dia.): 66

Exhaust Flow Rate (acfm): 72,800

Exhaust Temperature (°F): 115

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 95-A-326-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

#### **Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-05A**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-05A.1  
Emissions Control Equipment ID Number: CE-05A  
Emissions Control Equipment Description: Cyclone

---

Emission Unit vented through this Emission Point: EU-05A.1  
Emission Unit Description: Meal Dryer/ Cooler Deck #1  
Raw Material/Fuel: Soybeans  
Rated Capacity: 1,642,500 tons/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 98-A-400-S2  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.003 gr/dscf; 0.6 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-400-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.006 gr/dscf; 0.1 gr/dscf; 1.2 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-400-S2  
567 IAC 23.4(7)

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Operating limits are not required at this time.

#### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 71

Stack Opening, (inches, dia.): 30.5

Exhaust Flow Rate (scfm): 27,500

Exhaust Temperature (°F): 190

Discharge Style: Vertical (specified on Form 2.0)

Authority for Requirement: Iowa DNR Construction Permit 98-A-400-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Number: EP-06

### Associated Equipment

Associated Emission Unit ID Numbers: EU-06.1, EU-06.2, EU-06.3

Emissions Control Equipment ID Number: CE-06

Emissions Control Equipment Description: Bagfilter

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-06	EU-06.1	Grinders	Soybeans	1,642,500 tons/yr
	EU-06.2	Drag Conveyor		1,642,500 tons/yr
	EU-06.3	Sifters		1,642,500 tons/yr

### Applicable Requirements

#### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from this emission point shall not exceed the levels specified below.*

#### PSD Emission Limits

Pollutant	Limit	Reference
Opacity	0% <sup>(1)</sup>	Iowa DNR Construction Permit 95-A-327-S5
Particulate Matter (PM <sub>10</sub> )	0.002 gr/dscf <sup>(2)</sup> ; 0.24 lb/hr	Iowa DNR Construction Permit 95-A-327-S5
Particulate Matter (PM)	0.006 gr/dscf <sup>(3)</sup>	Iowa DNR Construction Permit 95-A-327-S5

<sup>(1)</sup> Standard is expressed as a six-minute average.

<sup>(2)</sup> Standard is expressed as 15-hour average.

<sup>(3)</sup> Standard is expressed as 4-hour average.

#### Other Emission Limits

Pollutant	Limits	Reference
Opacity	40%	Iowa DNR Construction Permit 95-A-327-S5; 567 IAC 23.3(2) "d"
Particulate Matter (PM <sub>10</sub> )	0.24 lb/hr	Iowa DNR Construction Permit 95-A-327-S5
Particulate Matter (PM)	0.1 gr/scf	Iowa DNR Construction Permit 95-A-327-S5; 567 IAC 23.4(7)

### Operational Limits & Requirements

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### Operating Limits

- A. The owner or operator shall maintain the control equipment according to manufacturer's specifications and maintenance schedule or per written facility specific operation and maintenance plan.

## **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 95-A-327-S5

## **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 54

Stack Opening, (inches, dia.): 30

Exhaust Flow Rate (scfm): 14,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-327-S5

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

The following emission units exhaust through this emission point:

<b>Emission Unit</b>	<b>Control Equipment</b>	<b>Rated Capacity</b>
Meal Grinders (EU-6.01)	Bag Filter (CE-6)	187.5 tons/hr <sup>1</sup>
Drag Conveyors (EU-6.02)	Bag Filter (CE-6)	187.5 tons/hr <sup>1</sup>
Sifters (EU-6.03)	Bag Filter (CE-6)	187.5 tons/hr <sup>1</sup>

<sup>1</sup> Rated capacity is in tons per hour of soybeans.

## **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed*

### **Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation,

the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-07**

Associated Equipment

Associated Emission Unit ID Numbers: EU-07.1, EU-07.2, EU-07.3

Emissions Control Equipment ID Number: CE-07

Emissions Control Equipment Description: Bagfilter

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-07	EU-07.1	Conveying	Soybeans	375 tons/hr
	EU-07.2	Sifter		375 tons/hr
	EU-07.3	Grinder		375 tons/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 95-A-328-S4  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.003 gr/dscf; 0.154 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-328-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.006 gr/dscf; 0.1 gr/dscf; 0.309 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-328-S4  
567 IAC 23.4(7)

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Operating limits are not required at this time.

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 25

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (acfm): 6,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 95-A-328-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

#### **Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-08**

Associated Equipment

Associated Emission Unit ID Numbers: EU-08.1, EU-08.2, EU-08.3, EU-08.4

Emissions Control Equipment ID Number: CE-08

Emissions Control Equipment Description: Bagfilter

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-08	EU-08.1	Rail Loadout	Soybean meal and hulls	375 tons/hr
	EU-08.2	Truck Loadout		375 tons/hr
	EU-08.3	Transfer Conveyor		375 tons/hr
	EU-08.4	Soybean CoProduct Loadout		8 tons/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S5  
56 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.0021 gr/dscf; 0.5 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S5

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.0042 gr/dscf; 1.0 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S5

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

- A. The control equipment shall be maintained according to the manufacturer's specifications.

**Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S5

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 120

Stack Opening, (inches, dia.): 30

Exhaust Flow Rate (scfm): 28,000

Exhaust Temperature (°F): 70

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-329-S5

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

#### **Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-09**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-09.1  
Emissions Control Equipment ID Number: CE-09  
Emissions Control Equipment Description: Bagfilter

---

Emission Unit vented through this Emission Point: EU-09.1  
Emission Unit Description: Material Storage Bin  
Raw Material/Fuel: Filter Aid  
Rated Capacity: 15 tons/hr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 0%  
Authority for Requirement: Iowa DNR Construction Permit 95-A-330  
567 IAC 23.3(20 "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)  
Emission Limit(s): 0.005 gr/dscf; 0.034 lb/hr; 0.15 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 95-A-330

Pollutant: Particulate Matter (PM)  
Emission Limit(s): 0.1 gr/scf  
Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

##### Monitoring

The stack exhaust shall be observed once per week and the presence/lack of a visible plume noted. If visible emissions are noted, the baghouse shall be inspected and necessary repairs completed within 24 hours of the observation. If, after 24 hours repairs have not been completed, the source shall be shutdown until they have been completed. The Department shall be notified of the exceedance and completion of the repairs within 24 hours of each respectively.

Authority for Requirement: Iowa DNR Construction Permit 95-A-330

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 45.3

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (acfm): 800

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 95-A-330

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

#### **Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years .The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-10**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-10.1  
Emissions Control Equipment ID Number: CE-10  
Emissions Control Equipment Description: Bagfilter

---

Emission Unit vented through this Emission Point: EU-10.1  
Emission Unit Description: Clay Handling  
Raw Material/Fuel: Filter Aid  
Rated Capacity: 15 tons/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 95-A-331  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.005 gr/dscf; 0.021 lb/hr; 0.09 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-331

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: 567 IAC 23.3(2)"a"

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### Monitoring

The stack exhaust shall be observed once per week and the presence/lack of a visible plume noted. If visible emissions are noted, the baghouse shall be inspected and necessary repairs completed within 24 hours of the observation. If, after 24 hours repairs have not been completed, the source shall be shutdown until they have been completed. The Department shall be notified of the exceedance and completion of the repairs within 24 hours of each respectively.

Authority for Requirement: Iowa DNR Construction Permit 95-A-331

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 40.8

Stack Opening, (inches, dia.): 4

Exhaust Flow Rate (acfm): 500

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 95-A-331

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-11**

Associated Equipment

Associated Emission Unit ID Numbers: EU-11.1, EU-11.2

Emissions Control Equipment ID Number: CE-11

Emissions Control Equipment Description: Bagfilter

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-11	EU-11.1	Conveying	Soybeans	243 tons/hr
	EU-11.2	East Grain Cleaner		243 tons/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5  
40 CFR 60 Subpart DD  
567 IAC 23.1(2) "ooo"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.002 gr/dscf; 0.48 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.006 gr/dscf; 0.01 gr/dscf; 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5  
567 IAC 23.4(7)  
40 CFR 60 Subpart DD  
567 IAC 23.1(2) "ooo"

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Operation limits are not required at this time.

**NSPS and NESHAP Applicability**

This emission point is subject to NSPS Subpart A – General Provisions and Subpart DD - Standards of Performance for Grain Elevators

Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 60

Stack Opening, (inches, dia.): 3.17

Exhaust Flow Rate (acfm): 28,000

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 95-A-332-S5

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

#### **Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-13**

Associated Equipment

Associated Emission Unit ID Numbers: EU-13.1, EU-13.2

Emissions Control Equipment ID Number: CE-13

Emissions Control Equipment Description: Cyclone

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-13	EU-13.1	Flaking	Soybeans	1,642,500 tons/yr
	EU-13.2	Conveying		1,642,500 tons/yr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S6  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 1.75 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S6

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf; 1.75 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S6  
567 IAC 23.4(7)

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

- A. The control equipment shall be operated and maintained per the manufacturer’s instructions and specifications.

**Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S6

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 85

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 17,981

Exhaust Temperature (°F): 100

Discharge Style: Vertical without rain cap or with unobstructing rain cap

Authority for Requirement: Iowa DNR Construction Permit 95-A-334-S6

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Number: EP-13A

### Associated Equipment

Associated Emission Unit ID Numbers: EU-13.1, EU-13.2

Emissions Control Equipment ID Number: CE-13A

Emissions Control Equipment Description: Cyclone

---

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

---

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-13A	EU-13A.1	Flaking	Soybeans	1,642,500 tons/yr
	EU-13A.2	Conveying		1,642,500 tons/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 98-A-401-S3  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.292 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-401-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf; 0.584 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-401-S3  
567 IAC 23.4(7)

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. The control equipment shall be operated and maintained per the manufacturer's instructions and specifications.

#### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. Maintain a record of all maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 98-A-401-S3

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 35

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 11,357

Exhaust Temperature (°F): 100

Discharge Style: Vertical without rain cap or with unobstructing rain cap

Authority for Requirement: Iowa DNR Construction Permit 98-A-401-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

#### **Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-15**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-15.1  
Emissions Control Equipment ID Number: CE-15  
Emissions Control Equipment Description: Bagfilter

---

Emission Unit vented through this Emission Point: EU-15.1  
Emission Unit Description: Grain Handling  
Raw Material/Fuel: Soybeans  
Rated Capacity: 15 tons/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 95-A-336-S4  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.003 gr/dscf; 0.02 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-336-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.006 gr/dscf; 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 95-A-336-S4  
567 IAC 23.4(7)

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Operating limits are not required at this time.

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 96

Stack Opening, (inches, dia.): 8

Exhaust Flow Rate (acfm): 800

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 95-A-336-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-16**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-16.1

Emissions Control Equipment ID Number: N/A

---

Emission Unit vented through this Emission Point: EU-16.1

Emission Unit Description: Vegetable Oil Process - Soybeans

Raw Material/Fuel: Soybeans

Rated Capacity: 1,642,500 tons/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.175 gal/ton; 887 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S7  
Civil Action Number 05-2037JMR/FLN

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.19 gal/ton; 887 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S7  
567 IAC BACT

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

There are no operating limits at this time

#### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The plant-wide totals of hexane and isohexane used, in gallons for each month.
- B. The plant-wide totals of hexane and isohexane used, in gallons per each 12 month period rolled monthly.
- C. The plant-wide total of hexane and isohexane used per twelve month period rolled monthly shall not exceed the VOC tons per year limit in Permit Condition 10.
- D. The total amount of soybeans processed, in tons for each month.
- E. The total amount of soybeans processed, in tons per 12 month period rolled monthly.
- F. Calculate and record the monthly and rolled 12 month totals of gallons of hexane and isohexane lost per ton of beans processed. This 12 month period rolled monthly value shall be used to verify compliance with the PSD BACT value of 0.19 gal of hexane loss

per ton of soybeans processed found in Permit Condition 10. This 12 month period rolled monthly value shall also be used to verify compliance with the USA EPA Consent Decree value of 0.175 gal of hexane loss per ton of soybeans processed found in Construction Permit Condition 10.

Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S7

**Consent Decree**

These emission units are subject to VOC requirements as required by the Consent Decree. Please see the "Plant-Wide Conditions" section and Appendix H of this permit for specific Consent Decree language regarding these emission units.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN  
567 IAC 22.108(1)

**NSPS and NESHAP Applicability**

This emission point is subject to NESHAP Subpart A – General Provisions and Subpart GGGG – National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production.

Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S7

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 54

Stack Opening, (inches, dia.): 6

Exhaust Flow Rate (scfm): N/A

Exhaust Temperature (°F): 70

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 95-A-337-S7

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-17**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-17.1

Emissions Control Equipment ID Number: N/A

---

Emission Unit vented through this Emission Point: EU-17.1

Emission Unit Description: External Combustion Boiler #2

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.097 MMCF/hr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 20% <sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S5  
567 IAC 23.3(2) "d"

<sup>(1)</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.2 tons/yr; 0.7 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S5

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.6 lb/MMBtu; 0.2 tons/yr; 0.7 lb/hr; 3.0 lb/MMCF

Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S5  
567 IAC 23.3(2) "b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S5  
567 IAC 23.3(3)

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 50.66 tons/yr <sup>(2)</sup>

Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S5

<sup>(2)</sup> Combined Limit for EP-17 (Boiler #2) and EP-23 (Boiler #3)

## **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Limits**

- A. This emission unit shall be limited to using Natural Gas as fuel.
- B. Only one of Boilers #2 and #3 shall be operated at any given time except for periods of startup and shutdown of the boilers.

### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The owner or operator shall keep records of the amount and type of fuel combusted in this boiler per day as required by NSPS Subpart Dc, 40 CFR 60.48c (f).

Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S5

### **Consent Decree**

These emission units are subject to NO<sub>x</sub> requirements as required by the Consent Decree. Please see the "Plant-Wide Conditions" section and Appendix F of this permit for specific Consent Decree language regarding these emission units.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN  
567 IAC 22.108(1)

### **NSPS and NESHAP Applicability**

This emission unit is subject to NSPS Subpart A – General Provisions and Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

This emission point is of the source type regulated by the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (567 IAC 23.1(4)"dd", 40 CFR Part 63, Subpart DDDDD). On July 30, 2007, the DC Circuit Court vacated this entire standard. Please see "Plant Wide Conditions" for details.

Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S5

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 38.5

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 22,900

Exhaust Temperature (°F): 320

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 86-A-036-S5

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-19**

Associated Equipment

Associated Emission Unit ID Numbers: EU-19.1  
Emissions Control Equipment ID Number: N/A

---

Emission Unit vented through this Emission Point: EU-19.1  
Emission Unit Description: External Combustion Boiler  
Raw Material/Fuel: Natural Gas  
Rated Capacity: 0.0117 MMCF/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 0%  
Authority for Requirement: Iowa DNR Construction Permit 95-A-339  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)  
Emission Limit(s): 0.068 lb/hr; 0.3 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 95-A-339

Pollutant: Particulate Matter (PM)  
Emission Limit(s): 0.6 lb/MMBtu  
Authority for Requirement: 567 IAC 23.3(2) "b"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)  
Emission Limit(s): 500 ppmv  
Authority for Requirement: 567 IAC 23.3(3)

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)  
Emission Limit(s): 1.64 lb/hr; 7.4 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 95-A-339

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

A. This source must use natural gas exclusively for the purpose of fueling the burner.

Authority for Requirement: Iowa DNR Construction Permit 95-A-339

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 31.5

Stack Opening, (in, dia.): 16

Exhaust Flow Rate (acfm): 4,000

Exhaust Temperature (°F): 425.26

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 95-A-339

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-20**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-20.1  
Emissions Control Equipment ID Number: CE-20  
Emissions Control Equipment Description: Bagfilter

---

Emission Unit vented through this Emission Point: EU-20.1  
Emission Unit Description: Conveying  
Raw Material/Fuel: Soybean Pellets  
Rated Capacity: 20 tons/hr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 98-A-402-S3  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.003 gr/dscf; 0.05 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-402-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.006 gr/dscf; 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 98-A-402-S3  
567 IAC 23.4(7)

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Operation limits are not required at this time.

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 96

Stack Opening, (inches): 7×9

Exhaust Flow Rate (acfm): 2,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 98-A-402-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

#### **Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Number: EP-21

### Associated Equipment

Associated Emission Unit ID Numbers: EU-21.1, EU-21.2

Emissions Control Equipment ID Number: N/A

---

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

---

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-21	EU-21.1	Drying	Soybeans	165 tons/hr
	EU-21.2	In Process Natural Gas Usage	Natural Gas	0.04 MMCF/hr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4  
40 CFR 60 Subpart DD  
567 IAC 23.1(2) "ooo"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.00175 gr/dscf; 1.8 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr/dscf; 0.1 gr/dscf; 10.6 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4  
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.9 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. The operation of the bean pre-cleaner system (EP#1 Grain Cleaner) is required whenever the Grain Dryer (EP21) is in operation.
- B. The column dryer shall have column plate perforations not to exceed 2.4 mm in diameter (ca 0.094 inch).

#### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. Maintain log of bean pre-cleaner system (EP#1 Grain Cleaner) operation and Berico Grain Dryer (EP21) operation, which shall include date and time each unit is operated.
- B. Verify and record diameter of column plate perforations within 60 days after the issuance of this permit and upon replacement or modification of column plates.

Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4

#### **NSPS and NESHAP Applicability**

This emission point is subject to NSPS Subpart A – General Provisions and Subpart DD – Standards of Performance for Grain Elevators

Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 21

Stack Opening, (inches, dia.): N/A

Exhaust Flow Rate (acfm): 124,000

Exhaust Temperature (°F): 80

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 95-A-340-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## Emission Point ID Number: EP-22

### Associated Equipment

Associated Emission Unit ID Numbers: EU-22.1, EU-22.2

Emissions Control Equipment ID Number: N/A

---

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

---

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-22	EU-22.1	Drying	Soybeans	93 tons/yr
	EU-22.2	In Process Natural Gas Usage	Natural Gas	0.04 MMCF/hr

### Applicable Requirements

#### Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3  
40 CFR 60 Subpart DD  
567 IAC 23.1(2) "ooo"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.00175 gr/dscf; 0.98 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 gr/dscf; 0.01 gr/dscf; 5.6 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3  
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO<sub>2</sub>)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.9 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3

## **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

### **Operating Limits**

- A. The operation of the bean pre-cleaner system (EP#1 Grain Cleaner) is required whenever the Grain Dryer II (EP22) is in operation.
- B. The column dryer shall have column plate perforations not to exceed 2.4 mm in diameter (ca 0.094 inch).

### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. Maintain log of bean pre-cleaner system (EP#1 Grain Cleaner) operation and Grain Dryer II (EP22) operation, which shall include date and time each unit is operated.
- B. Verify and record diameter of column plate perforations within 60 days after the issuance of this permit and upon replacement or modification of column plates.

Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3

### **NSPS and NESHAP Applicability**

This emission point is subject to NSPS Subpart A – General Provisions and Subpart DD – Standards of Performance for Grain Elevators

Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 65.5

Stack Opening, (inches, dia.): N/A

Exhaust Flow Rate (acfm): 67,000

Exhaust Temperature (°F): 80

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 98-A-403-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-23**

Associated Equipment

Associated Emission Unit ID Numbers: EU-23.1, EU-23.2, EU-23.3

Emissions Control Equipment ID Number: N/A

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-23	EU-23.1	Reconditioned Boiler	Natural Gas	0.1843 MMCF/hr
	EU-23.2		Fuel Oil	1.25 kgal/hr
	EU-23.3		Vegetable Oil	1.25 kgal/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Emission Limits for EU-23.1 (Natural Gas)

Pollutant	Limit	Reference
Opacity	0%; 20% <sup>(1)</sup>	Iowa DNR Construction Permit 95-A-341-S6 567 IAC 23.3(2) "d"
Particulate Matter (PM <sub>10</sub> )	5.06 tons/yr	Iowa DNR Construction Permit 95-A-341-S6
Particulate Matter (PM)	0.6 lb/MMBtu	Iowa DNR Construction Permit 95-A-341-S6 567 IAC 23.3(2) "b"
Sulfur Dioxide (SO <sub>2</sub> )	29.28 tons/yr; 500 ppmv	Iowa DNR Construction Permit 95-A-341-S6 567 IAC 23.3(3) "b"
Nitrogen Oxides (NO <sub>x</sub> )	0.2 lb/MMBtu; 10.1 lb/hr; 50.66 tons/yr <sup>(2)</sup>	Iowa DNR Construction Permit 95-A-341-S6 40 CFR 60 Subpart Db 567 IAC 23.3(3) "b" 567 IAC 23.1(2) "ccc"
Volatile Organic Compounds (VOC)	5.06 tons/yr	Iowa DNR Construction Permit 95-A-341-S6

<sup>(1)</sup>An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup>Combined Limit for EP-17 (Boiler #2) and EP-23 (Boiler #3)

### Emission Limits for EU-23.2 and EU-23.3 (Liquid Fuels)

Pollutant	Limit	Reference
Opacity	10%; 20% <sup>(1)</sup>	Iowa DNR Construction Permit 95-A-341-S6 567 IAC 23.3(2) "d"
Particulate Matter (PM <sub>10</sub> )	2.5 lb/hr; 5.06 tons/yr	Iowa DNR Construction Permit 95-A-341-S6
Particulate Matter (PM)	0.6 lb/MMBtu	Iowa DNR Construction Permit 95-A-341-S6 567 IAC 23.3(2) "b"
Sulfur Dioxide (SO <sub>2</sub> )	2.5 lb/MMBtu; 29.28 tons/yr; 45.47 lb/hr	Iowa DNR Construction Permit 95-A-341-S6 567 IAC 23.3(3) "e"
Nitrogen Oxides (NO <sub>x</sub> )	0.2 lb/MMBtu; 21.1 lb/hr; 50.66 tons/yr <sup>(2)</sup>	Iowa DNR Construction Permit 95-A-341-S6 40 CFR 60 Subpart Db 567 IAC 23.1(2) "ccc"
Volatile Organic Compounds (VOC)	1.3 lb/hr; 5.06 tons/yr	Iowa DNR Construction Permit 95-A-341-S6

<sup>(1)</sup>An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> Combined Limit for EP-17 (Boiler #2) and EP-23 (Boiler #3)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. Only one of Boilers #2 and #3 shall be operated at any given time except for periods of startup and shutdown of the two boilers.
- B. The maximum steam capacity of Boiler #3 shall be limited to 150,000 pounds of steam per hour.
- C. The Primary fuel shall be natural gas.
- D. The Backup fuel shall be #2 fuel oil, or vegetable oil.
- E. The Sulfur content of the #2 fuel oil used in this boiler shall not exceed 0.25%, by weight.
- F. The Sulfur content of the vegetable oil used in this boiler shall not exceed 0.15%, by weight.
- G. The Nitrogen content of the #2 fuel oil used in this boiler shall not exceed 0.05%, by weight.
- H. This plant shall not use more than 1,600,000 gallons of #2 fuel oil or vegetable oil as fuel per rolling twelve month period.

## Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record the total quantity of #2 fuel oil and vegetable oil combusted (in gallons) per twelve-month rolling total.
- B. Maintain records as to the sulfur content (% by weight) of the vegetable oil.
- C. Records shall be maintained per 40 CFR 60.40b - NSPS Subpart Db.

This unit is subject to the following provisions:

- 1. 40 CFR 60.40b (a) Applicability.
- 2. 40 CFR 60.41b Definitions.
- 3. 40 CFR 60.42b (j) Standard for sulfur dioxide.
- 4. 40 CFR 60.42b (j)(1) Standard for sulfur dioxide.
- 5. 40 CFR 60.43b (f) Standard for opacity.
- 6. 40 CFR 60.43b (g) Standard for particulate matter.
- 7. 40 CFR 60.44b (a) and (a)(1)(ii) Standard for nitrogen oxides.
- 8. 40 CFR 60.44b (h) Standard for nitrogen oxides.
- 9. 40 CFR 60.44b (i) Standard for nitrogen oxides.
- 10. 40 CFR 60.46b (e)(4) Performance test procedure for nitrogen oxides.
- 11. 40 CFR 60.47b (f) Emissions monitoring for sulfur dioxide.
- 12. 40 CFR 60.48b (a) Emissions monitoring for opacity.
- 13. 40 CFR 60.48b (b) Emissions monitoring for nitrogen oxides.
- 14. 40 CFR 60.48b (c) Emission monitoring for nitrogen oxides.
- 15. 40 CFR 60.48b (g), (g)(1) and (g)(2) Emissions monitoring for NO<sub>x</sub> alternatives.
- 16. 40 CFR 60.49b(c), (c)(1), (c)(2) and (c)(3) Reporting and recordkeeping requirements for nitrogen oxides unit operating conditions.
- 17. 40 CFR 60.49b (f) Recordkeeping for opacity.
- 18. 40 CFR 60.49b (g), (g)(1), (g)(2) and (g)(3) Recordkeeping for nitrogen oxides.
- 19. 40 CFR 60.49b (h), (h)(1) and (h)(2) Reporting of excess emissions.
- 20. 40 CFR 60.49b (h)(3) Excess emissions for opacity.
- 21. 40 CFR 60.49b (o) Recordkeeping requirements.
- 22. 40 CFR 60.49b (r) Recordkeeping requirements for fuel oil.

Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S6

## Predictive Emission Monitoring (PEM) for Nitrogen Oxides (NO<sub>x</sub>)

The PEM program will include the following parameters: flue gas flow and oxygen content in the boiler (from *in situ* analyzer).

Records shall be maintained on-site for a period of five years for the following:

- 1. The steam generating unit load per NSPS 40 CFR 60 Subpart Db.
- 2. The average hourly NO<sub>x</sub> emission rates in both lb/hr and lb/MMBtu.
- 3. The 30-day average NO<sub>x</sub> emission rates calculated at the end of each steam generating unit operating day in both lb/hr and lb/MMBtu.
- 4. Identification of any violation of the permitted allowable NO<sub>x</sub> limit.

5. Identification of any days for which data have not been obtained, including reasons for not obtaining data and a description of actions taken.
6. Identification of times when emissions data have been excluded from the calculation of the average emission rates and the reasons for excluding data.
7. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted.

#### PEM Operating Procedure

- Computer shall show readings updated every 60 minutes. If PEM is down contact supervisor and Cargill Corporate Information Technologist.
- After each PEM operating day (midnight to midnight) print out the daily report.
- Record on the daily report (if necessary, attach a(n) additional sheet(s)):
  - 1) PEM downtime, including the date, the starting and ending times, the reason for the malfunction, and any corrective action taken.
  - 2) Any exceedances of the NO<sub>x</sub> limit, the circumstances that caused the exceedance(s), the date, the starting and ending times of the event, and any corrective action taken.
  - 3) Boiler downtime, including the date, the starting and ending times, and verification that the PEM is recording zero NO<sub>x</sub> emissions for each period.
- Record in the quarterly report:
  - 1) PEM downtime, including the date, the starting and ending times, the reason for the malfunction, and any corrective action taken.
  - 2) Any exceedances of the NO<sub>x</sub> limit, the circumstances that caused the exceedance(s), the date, the starting and ending times of the event, and any corrective action taken.
  - 3) Boiler downtime, including the date, the starting and ending times, and verification that the PEM is recording zero NO<sub>x</sub> emissions for each period.
- All daily records shall be filed in the designated area.
- An alternative method of determining NO<sub>x</sub> emissions shall be in place when the PEM downtime exceeds eight (8) days in any 30-day period.

#### Quality Assurance/Quality Control (QA/QC) for PEM

In order to ensure the accuracy of the PEM data, the attached QA/QC plan shall be followed. See Appendix G for details.

#### Consent Decree

These emission units are subject to NO<sub>x</sub> requirements as required by the Consent Decree. Please see the "Plant-Wide Conditions" section and Appendix G of this permit for specific Consent Decree language regarding these emission units.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN  
567 IAC 22.108(1)

#### NSPS and NESHAP Applicability

This emission point is subject to NSPS Subpart A – General Provisions and Subpart Db – Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units.

This emission point is of the source type regulated by the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (567 IAC 23.1(4)"dd", 40 CFR Part 63, Subpart DDDDD). On July 30, 2007, the DC Circuit Court vacated this entire standard. Please see "Plant Wide Conditions" for details.

Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S6

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 100

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 33,000

Exhaust Temperature (°F): 350

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-341-S6

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-23.2**

Associated Equipment

Associated Emission Unit ID Numbers: EU-23.21, EU-23.22, EU-23.23

Emissions Control Equipment ID Number: N/A

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-23.2	EU-23.21	Boiler #3 Heat Recovery Stack	Natural Gas	0.1843 MMCF/hr
	EU-23.22		Fuel Oil	1.25 kgal/hr
	EU-23.23		Vegetable Oil	1.25 kgal/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Emission Limits for EU-23.21 (Natural Gas)

Pollutant	Limit	Reference
Opacity	0%; 20% <sup>(1)</sup>	Iowa DNR Construction Permit 07-A-989 567 IAC 23.3(2) "d"
Particulate Matter (PM <sub>10</sub> )	5.06 tons/yr	Iowa DNR Construction Permit 07-A-989
Particulate Matter (PM)	0.6 lb/MMBtu	Iowa DNR Construction Permit 07-A-989 567 IAC 23.3(2) "b"
Sulfur Dioxide (SO <sub>2</sub> )	29.28 tons/yr; 500 ppmv	Iowa DNR Construction Permit 07-A-989 567 IAC 23.3(3) "e"
Nitrogen Oxides (NO <sub>x</sub> )	0.2 lb/MMBtu; 10.1 lb/hr; 50.66 tons/yr <sup>(2)</sup>	Iowa DNR Construction Permit 07-A-989 40 CFR 60 Subpart Db 567 IAC 23.1(2) "ccc"
Volatile Organic Compounds (VOC)	5.06 tons/yr	Iowa DNR Construction Permit 07-A-989

<sup>(1)</sup>An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> Combined Limit for EP-17 (Boiler #2) and EP-23 (Boiler #3)

### Emission Limits for EU-23.22 and EU-23.23 (Liquid Fuels)

Pollutant	Limit	Reference
Opacity	10%; 20% <sup>(1)</sup>	Iowa DNR Construction Permit 07-A-989 567 IAC 23.3(2) "d"
Particulate Matter (PM <sub>10</sub> )	2.5 lb/hr; 5.06 tons/yr	Iowa DNR Construction Permit 07-A-989
Particulate Matter (PM)	0.6 lb/MMBtu	Iowa DNR Construction Permit 07-A-989 567 IAC 23.3(2) "b"
Sulfur Dioxide (SO <sub>2</sub> )	2.5 lb/MMBtu; 29.28 tons/yr; 45.47 lb/hr	Iowa DNR Construction Permit 07-A-989 567 IAC 23.3(3) "e"
Nitrogen Oxides (NO <sub>x</sub> )	0.2 lb/MMBtu; 21.1 lb/hr; 50.66 tons/yr <sup>(2)</sup>	Iowa DNR Construction Permit 07-A-989 40 CFR 60 Subpart Db 567 IAC 23.1(2) "ccc"
Volatile Organic Compounds (VOC)	1.3 lb/hr; 5.06 tons/yr	Iowa DNR Construction Permit 07-A-989

<sup>(1)</sup>An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>(2)</sup> Combined Limit for EP-17 (Boiler #2) and EP-23 (Boiler #3)

### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. Only one of Boilers #2 and #3 shall be operated at any given time except for periods of startup and shutdown of the two boilers.
- B. The maximum steam capacity of Boiler #3 shall be limited to 150,000 pounds of steam per hour.
- C. The Primary fuel shall be natural gas.
- D. The Backup fuel shall be #2 fuel oil, or vegetable oil.
- E. The Sulfur content of the #2 fuel oil used in this boiler shall not exceed 0.25%, by weight.
- F. The Sulfur content of the vegetable oil used in this boiler shall not exceed 0.15%, by weight.
- G. The Nitrogen content of the #2 fuel oil used in this boiler shall not exceed 0.05%, by weight.
- H. This plant shall not use more than 1,600,000 gallons of #2 fuel oil or vegetable oil as fuel per rolling twelve month period.

## **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. Record the total quantity of #2 fuel oil and vegetable oil combusted (in gallons) per twelve-month rolling total.
- B. Maintain records as to the sulfur content (% by weight) of the vegetable oil.
- C. Records shall be maintained per 40 CFR 60.40b - NSPS Subpart Db.

This unit is subject to the following provisions:

- 1. 40 CFR 60.40b (a) Applicability.
- 2. 40 CFR 60.41b Definitions.
- 3. 40 CFR 60.42b (j) Standard for sulfur dioxide.
- 4. 40 CFR 60.42b (j)(1) Standard for sulfur dioxide.
- 5. 40 CFR 60.43b (f) Standard for opacity.
- 6. 40 CFR 60.43b (g) Standard for particulate matter.
- 7. 40 CFR 60.44b (a) and (a)(1)(ii) Standard for nitrogen oxides.
- 8. 40 CFR 60.44b (h) Standard for nitrogen oxides.
- 9. 40 CFR 60.44b (i) Standard for nitrogen oxides.
- 10. 40 CFR 60.46b (e)(4) Performance test procedure for nitrogen oxides.
- 11. 40 CFR 60.47b (f) Emissions monitoring for sulfur dioxide.
- 12. 40 CFR 60.48b (a) Emissions monitoring for opacity.
- 13. 40 CFR 60.48b (b) Emissions monitoring for nitrogen oxides.
- 14. 40 CFR 60.48b (c) Emission monitoring for nitrogen oxides.
- 15. 40 CFR 60.48b (g), (g)(1) and (g)(2) Emissions monitoring for NO<sub>x</sub> alternatives.
- 16. 40 CFR 60.49b (c), (c)(1), (c)(2) and (c)(3) Reporting and recordkeeping requirements for nitrogen oxides unit operating conditions.
- 17. 40 CFR 60.49b (f) Recordkeeping for opacity.
- 18. 40 CFR 60.49b (g), (g)(1), (g)(2) and (g)(3) Recordkeeping for nitrogen oxides.
- 19. 40 CFR 60.49b (h), (h)(1) and (h)(2) Reporting of excess emissions.
- 20. 40 CFR 60.49b (h)(3) Excess emissions for opacity.
- 21. 40 CFR 60.49b (o) Recordkeeping requirements.
- 22. 40 CFR 60.49b (r) Recordkeeping requirements for fuel oil.

## **Predictive Emission Monitoring (PEM) for Nitrogen Oxides (NO<sub>x</sub>)**

The PEM program will include the following parameters: flue gas flow and oxygen content in the boiler (from *in situ* analyzer).

Records shall be maintained on-site for a period of five years for the following:

- 8. The steam generating unit load per NSPS 40 CFR 60 Subpart Db.
- 9. The average hourly NO<sub>x</sub> emission rates in both lb/hr and lb/MMBtu.
- 10. The 30-day average NO<sub>x</sub> emission rates calculated at the end of each steam generating unit operating day in both lb/hr and lb/MMBtu.
- 11. Identification of any violation of the permitted allowable NO<sub>x</sub> limit.
- 12. Identification of any days for which data have not been obtained, including reasons for not obtaining data and a description of actions taken.

13. Identification of times when emissions data have been excluded from the calculation of the average emission rates and the reasons for excluding data.
14. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted.

#### PEM Operating Procedure

- Computer shall show readings updated every 60 minutes. If PEM is down contact supervisor and Cargill Corporate Information Technologist.
- After each PEM operating day (midnight to midnight) print out the daily report.
- Record on the daily report (if necessary, attach a(n) additional sheet(s)):
  - 4) PEM downtime, including the date, the starting and ending times, the reason for the malfunction, and any corrective action taken.
  - 5) Any exceedances of the NO<sub>x</sub> limit, the circumstances that caused the exceedance(s), the date, the starting and ending times of the event, and any corrective action taken.
  - 6) Boiler downtime, including the date, the starting and ending times, and verification that the PEM is recording zero NO<sub>x</sub> emissions for each period.
- Record in the quarterly report:
  - 4) PEM downtime, including the date, the starting and ending times, the reason for the malfunction, and any corrective action taken.
  - 5) Any exceedances of the NO<sub>x</sub> limit, the circumstances that caused the exceedance(s), the date, the starting and ending times of the event, and any corrective action taken.
  - 6) Boiler downtime, including the date, the starting and ending times, and verification that the PEM is recording zero NO<sub>x</sub> emissions for each period.
- All daily records shall be filed in the designated area.
- An alternative method of determining NO<sub>x</sub> emissions shall be in place when the PEM downtime exceeds eight (8) days in any 30-day period.

#### Quality Assurance/Quality Control (QA/QC) for PEM

In order to ensure the accuracy of the PEM data, the attached QA/QC plan shall be followed. See Appendix G for details.

Authority for Requirement: Iowa DNR Construction Permit 07-A-989

#### Consent Decree

These emission units are subject to NO<sub>x</sub> requirements as required by the Consent Decree. Please see the "Plant-Wide Conditions" section and Appendix G of this permit for specific Consent Decree language regarding these emission units.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN  
567 IAC 22.108(1)

#### NSPS and NESHAP Applicability

This emission point is subject to NSPS Subpart A – General Provisions and Subpart Db – Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units.

This emission point is of the source type regulated by the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (567 IAC 23.1(4)"dd", 40 CFR Part 63, Subpart DDDDD). On July 30, 2007, the DC Circuit Court vacated this entire standard. Please see "Plant Wide Conditions" for details.

Authority for Requirement: Iowa DNR Construction Permit 07-A-989

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 100

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 33,000

Exhaust Temperature (°F): 350

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 07-A-989

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?**      Yes  No

**Facility Maintained Operation & Maintenance Plan Required?**      Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?**      Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-25**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-25.1  
Emissions Control Equipment ID Number: CE-25  
Emissions Control Equipment Description: Bagfilter

---

Emission Unit vented through this Emission Point: EU-25.1  
Emission Unit Description: Storage Tank  
Raw Material/Fuel: Filter Aid  
Rated Capacity: 48,000 scf/hr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 5%  
Authority for Requirement: Iowa DNR Construction Permit 94-A-507  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)  
Emission Limit(s): 0.005 gr/dscf; 0.03 lb/hr; 0.13 tons/yr  
Authority for Requirement: Iowa DNR Construction Permit 94-A-507

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

Operation limits are not required at this time.

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 45
- Stack Opening, (inches, dia.): 5×4.5
- Exhaust Flow Rate (scfm): 800
- Exhaust Temperature (°F): 70
- Discharge Style: Vertical
- Authority for Requirement: Iowa DNR Construction Permit 94-A-507

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>5 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

**Emission Point ID Number: EP-26**

Associated Equipment

Associated Emission Unit ID Numbers: EU-26.1, EU-26.2

Emissions Control Equipment ID Number: CE-26

Emissions Control Equipment Description: Bagfilter

Emission Unit Descriptions, Raw Material/Fuel and Rated Capacity are listed in the following table:

*EP=Emission Point, EU=Emission Unit*

EP	EU	Emission Unit Description	Raw Material	Rated Capacity
EP-26	EU-26.01	Truck Dump	Soybeans	700 tons/hr
	EU-26.02	Tank Conveyors & Legs		700 tons/hr

**Applicable Requirements**

**Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4  
567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.003 gr/dscf; 0.87 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.006 gr/dscf; 1.8 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4

**Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

- A. The control equipment shall be maintained according to the manufacturer's specifications.
- B. Bean Truck Receiving II shall not receive more than 700 tons of beans per hour, averaged daily.

### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The owner or operator shall maintain a record of control equipment maintenance and inspection results.
- B. The owner or operator shall maintain a record of the amount of beans that are received at Bean Truck Receiving II each day that it receives beans.
- C. The owner or operator shall maintain a record of the amount of time Bean Truck Receiving II receives beans each day that it receives beans.
- D. The owner or operator shall calculate the average daily throughput of Bean Truck Receiving II in tons of beans per hour by dividing the amount of beans that are received at Bean Truck Receiving II each day by the amount of time Bean Truck Receiving II receives beans each day.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4

### **NSPS and NESHAP Applicability**

This emission point is subject to NSPS Subpart A – General Provisions and Subpart DD – Standards of Performance for Grain Elevators.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S4

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 150

Stack Opening, (inches, dia.): 38

Exhaust Flow Rate (scfm): 34,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, unobstructed

Authority for Requirement: Iowa DNR Construction Permit 96-A-1253-S

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-27**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-27.1  
Emissions Control Equipment ID Number: CE-27  
Emissions Control Equipment Description: Cyclone

---

Emission Unit vented through this Emission Point: EU-27.1  
Emission Unit Description: Bean Conditioner  
Raw Material/Fuel: Soybeans  
Rated Capacity: 1,642,500 tons/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity  
Emission Limit(s): 0%  
Authority for Requirement: Iowa DNR Construction Permit 98-A-404-S3

<sup>(1)</sup> If visible emissions are observed other than start-up, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter (PM<sub>10</sub>)  
Emission Limit(s): 0.01 gr/dscf; 0.14 lb/hr  
Authority for Requirement: Iowa DNR Construction Permit 98-A-404-S3

Pollutant: Particulate Matter (PM)  
Emission Limit(s): 0.02 gr/dscf; 0.1 gr/dscf; 0.28 lb/hr  
Authority for Requirement: Iowa DNR Construction Permit 98-A-404-S3  
567 IAC 23.4(7)

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Operation limits are not required at this time.

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 40.5

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (acfm): 2,000

Exhaust Temperature (°F): 200

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 98-A-404-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-28**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-28.1  
Emissions Control Equipment ID Number: CE-28  
Emissions Control Equipment Description: Cyclone

---

Emission Unit vented through this Emission Point: EU-28.1  
Emission Unit Description: Pellet Cooler  
Raw Material/Fuel: Soybean Pellets  
Rated Capacity: 20 tons/hr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.003 gr/dscf; 0.16 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.006 gr/dscf; 0.32 lb/hr

Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. The daily averaged processing rate of the pellet cooler shall not exceed 15 tons per hour.

#### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The owner or operator of the equipment shall keep adequate records to show the daily averaged processing rate of the pellet cooler (in tons per hour).

Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 55

Stack Opening, (inches, dia.): 21

Exhaust Flow Rate (scfm): 6,100

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical w/o rain cap or w/ unobstructing rain cap

Authority for Requirement: Iowa DNR Construction Permit 98-A-405-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### **Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

#### **Opacity Monitoring**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-29**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-29.1

Emissions Control Equipment ID Number: N/A

---

Emission Unit vented through this Emission Point: EU-29.1

Emission Unit Description: 13.5 MMBtu/hr Boiler

Raw Material/Fuel: Natural Gas

Rated Capacity: 0.013 MMCF/hr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.6 lb/MMBtu

Authority for Requirement: Iowa DNR Construction Permit 99-A-667

567 IAC 23.3(2) "b"

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. The unit is restricted to the combustion of natural gas only.

#### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The requirement of 40 CFR 60.48c (g) to record and maintain the amount of fuel combusted is reduced from daily to monthly.

Authority for Requirement: Iowa DNR Construction Permit 99-A-667

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 38

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (acfm): 5,800

Exhaust Temperature (°F): 600

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 99-A-667

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-30**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-30  
Emissions Control Equipment ID Number: CE-30  
Emissions Control Equipment Description: Bagfilter

---

Emission Unit vented through this Emission Point: EU-30  
Emission Unit Description: Meal Flow Additive Tank  
Raw Material/Fuel: Meal Additive  
Rated Capacity: 19.5 tons/hr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): No visible emissions <sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 02-A-282-S1  
567 IAC 23.3(2) "d"

<sup>(1)</sup> If visible emissions are observed other than startup, shutdown, or malfunction a stack test may be required to demonstrate compliance with the particulate standard. This standard is in lieu of an initial compliance test for PM.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-282-S1  
567 IAC 23.3(2) "a"

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. The control equipment associated with the emission unit that exhausts from this emission point shall be maintained according to the manufacturer's specifications.

#### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

Authority for Requirement: Iowa DNR Construction Permit 02-A-282-S1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 65

Stack Opening, (inches, dia.): 7

Exhaust Flow Rate (scfm): 600

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 02-A-282-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Opacity Monitoring**

Visible emissions shall be observed on a weekly basis to ensure none occur when the emission unit on this emission point is at or near full capacity. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake visible emissions readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-31**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-31  
Emissions Control Equipment ID Number: CE-31  
Emissions Control Equipment Description: Bagfilter

---

Emission Unit vented through this Emission Point: EU-31  
Emission Unit Description: Soybean CoProduct System  
Raw Material/Fuel: Soybeans  
Rated Capacity: 1,642,500 tons/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40% <sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 02-A-554-S1  
567 IAC 23.3(2) "d"

<sup>(1)</sup>An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.005 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-554-S1

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. The control equipment shall be inspected and maintained according to manufacturer's specifications.

#### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

Authority for Requirement: Iowa DNR Construction Permit 02-A-554-S1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 65

Stack Opening, (inches, dia.): 22

Exhaust Flow Rate (scfm): 9,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-554-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

*Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.*

*Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.*

*Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.*

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-32**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-32  
Emissions Control Equipment ID Number: CE-32  
Emissions Control Equipment Description: Bagfilter

---

Emission Unit vented through this Emission Point: EU-32  
Emission Unit Description: Soybean CoProduct Storage  
Raw Material/Fuel: Soybean CoProduct  
Rated Capacity: 8 tons/hr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40% <sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 02-A-555-S1  
567 IAC 23.3(2) "d"

<sup>(1)</sup>An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.005 gr/dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-555-S1

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. The control equipment shall be inspected and maintained according to manufacturer's specifications.

#### **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The owner or operator shall maintain a record of control equipment maintenance and inspection results.

Authority for Requirement: Iowa DNR Construction Permit 02-A-555-S1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 97

Stack Opening, (inches, dia.): 7x9

Exhaust Flow Rate (scfm): 1,000

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 02-A-555-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-33**

### Associated Equipment

Associated Emission Unit ID Numbers: EU-33

Emissions Control Equipment ID Number: N/A

---

Emission Unit vented through this Emission Point: EU-33

Emission Unit Description: Vegetable Oil Refinery

Raw Material/Fuel: Vegetable Oil

Rated Capacity: 1,180 Million lb/yr

### **Applicable Requirements**

#### **Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)**

*The emissions from this emission point shall not exceed the levels specified below.*

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2) "d"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 36.0 tons/yr

Authority for Requirement: Iowa DNR Construction Permit 03-A-028-S1

Pollutant: Single Hazardous Air Pollutant (Single HAP)

Emission Limit(s): 23.4 tons/yr <sup>(1)</sup>

Authority for Requirement: Iowa DNR Construction Permit 03-A-028-S1

<sup>(1)</sup>Potential to emit for n-hexane (CAS # 110543) emissions from the refining of oil from outside suppliers, based on 65% of the potential to emit for VOC.

#### **Operational Limits & Requirements**

*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

#### **Operating Limits**

- A. The amount of vegetable oil received from outside suppliers that is processed in the Refinery Process at this plant shall not exceed 720,000,000 pounds in any rolling twelve-month period. This shall include crude vegetable oil and semi-refined vegetable oil.
- B. The total amount of vegetable oil processed in the Refinery Process at this plant shall not exceed 1,180,000,000 pounds in any rolling twelve-month period.

## **Reporting and Recordkeeping**

*All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.*

- A. The permittee shall keep records on the VOC and the HAP content of the vegetable oil that is received from outside suppliers for processing in the Refinery. A sample of oil shall be taken from each truck and railcar that deliver oil from an outside supplier. During a 24 hour period, a composite sample from all trucks and/or railcars that contain the same type of oil from the same facility shall be prepared and analyzed for VOC (ppm by wt.) This shall include both crude and semi-refined vegetable oils.
- B. The analysis for VOC may be reduced for semi-refined vegetable oil received from outside suppliers in the following way. The oil shall be sampled and analyzed in accordance with the procedure described in Condition 15. (A) for a three month period. If no VOC is detected in the semi-refined oil, the analysis may be reduced to a monthly analysis of a composite sample from all trucks and/or railcars that contain the same type of oil from the same facility. The composite sample shall be composed of a sample of oil from each truck and railcar that deliver oil from the outside supplier during a period of a month. If the monthly analysis shows that the oil contains VOC, the sampling and analysis shall return to the procedure described in Condition 15. (A).
- C. The permittee shall keep the following monthly records:
  - C1. The total amount of vegetable oil that is processed in the Refinery Process at this plant (pounds).
  - C2. The rolling 12-month total of the amount of vegetable oil that is processed in the Refinery Process at this plant (pounds).
  - C3. The amount of vegetable oil received from outside suppliers that are processed in the Refinery Process at this plant (pounds). This shall include both crude and semi-refined vegetable oils.
  - C4. The rolling 12-month total of the amount of vegetable oil received from outside suppliers that are processed in the Refinery Process at this plant (pounds). This shall include both crude and semi-refined vegetable oils.
  - C5. The amount of VOC emitted from the processing of vegetable oil received from outside suppliers in the Refinery Process at this plant (tons). This shall be based on the amount of oil received and the analysis of the composite sample of the oil.
  - C6. The rolling 12-month emission rate of VOC from the processing of vegetable oil received from outside suppliers in the Refinery Process at this plant (tons).
  - C7. The amount of HAP emitted from the processing of vegetable oil received from outside suppliers in the Refinery Process at this plant (tons).
  - C8. The rolling 12-month emission rate of HAP from the processing of vegetable oil received from outside suppliers in the Refinery Process at this plant (tons).

Authority for Requirement: Iowa DNR Construction Permit 03-A-028-S1

**NSPS and NESHAP Applicability**

This emission point is subject to NESHAP Subpart A – General Provisions and Subpart GGGG – Solvent Extraction for Vegetable Oil Production) does not apply to the refinery operations

Authority for Requirement: Iowa DNR Construction Permit 03-A-028-S1

**Monitoring Requirements**

*The owner/operator of this equipment shall comply with the monitoring requirements listed below.*

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

Authority for Requirement: 567 IAC 22.108(3)

## IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

### G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

### G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

### G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

### G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in

accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

#### **G5. Semi-Annual Monitoring Report**

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

#### **G6. Annual Fee**

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
  - a. Form 1.0 "Facility Identification";
  - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
  - c. Form 5.0 "Title V annual emissions summary/fee"; and
  - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
  - a. Form 1.0 "Facility Identification";
  - b. Form 5.0 "Title V annual emissions summary/fee";
  - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

### **G7. Inspection of Premises, Records, Equipment, Methods and Discharges**

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

### **G8. Duty to Provide Information**

The permittee shall furnish to the director, within a reasonable time, 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 also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

### **G9. General Maintenance and Repair Duties**

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

### **G10. Recordkeeping Requirements for Compliance Monitoring**

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance

records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

#### **G11. Evidence used in establishing that a violation has or is occurring.**

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

#### **G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

#### **G13. Hazardous Release**

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

#### **G14. Excess Emissions and Excess Emissions Reporting Requirements**

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing

emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

## 2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1) ) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.

- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

#### **G15. Permit Deviation Reporting Requirements**

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

#### **G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations**

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

## **G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification**

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
  - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
  - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
  - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
  - d. The changes are not subject to any requirement under Title IV of the Act.
  - e. The changes comply with all applicable requirements.
  - f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
    - i. A brief description of the change within the permitted facility,
    - ii. The date on which the change will occur,
    - iii. Any change in emission as a result of that change,
    - iv. The pollutants emitted subject to the emissions trade
    - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
    - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
    - vii. Any permit term or condition no longer applicable as a result of the change.
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

## **G18. Duty to Modify a Title V Permit**

### **1. Administrative Amendment.**

- a. An administrative permit amendment is a permit revision that is required to do any of the following:
  - i. Correct typographical errors
  - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - iii. Require more frequent monitoring or reporting by the permittee; or
  - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

### **2. Minor Permit Modification.**

- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
  - i. Do not violate any applicable requirements
  - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
  - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
  - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
  - v. Are not modifications under any provision of Title I of the Act; and
  - vi. Are not required to be processed as significant modification.
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
  - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
  - ii. The permittee's suggested draft permit
  - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification

procedures and a request that such procedures be used; and  
iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113 The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.105(1)"a"(4)

#### **G19. Duty to Obtain Construction Permits**

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 567 IAC 22.1(1)

#### **G20. Asbestos**

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations, training fires and controlled burning of a demolished building. 567 IAC 23.1(3)"a", and 567 IAC 23.2

#### **G21. Open Burning**

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. 567 IAC 23.2 *except* 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only

#### **G22. Acid Rain (Title IV) Emissions Allowances**

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedances of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to

the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

### **G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements**

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers in which a class I or class II substance is 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 into interstate commerce pursuant to § 82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
  - c. The form of the label bearing the required warning statement 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.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  - 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.
  - 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 reporting and recordkeeping 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 the 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.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. 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 system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated

pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

#### **G24. Permit Reopenings**

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
  - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
  - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
  - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
  - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
  - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
  - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
  - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

## **G25. Permit Shield**

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
  - a. Such applicable requirements are included and are specifically identified in the permit; or
  - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
  - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

## **G26. Severability**

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

## **G27. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

## **G28. Transferability**

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

## **G29. Disclaimer**

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

## **G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification**

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the

department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator  
Iowa DNR, Air Quality Bureau  
7900 Hickman Road, Suite #1  
Urbandale, IA 50322  
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

*567 IAC 25.1(7)"a", 567 IAC 25.1(9)*

### **G31. Prevention of Air Pollution Emergency Episodes**

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

*567 IAC 26.1(1)*

### **G32. Contacts List**

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits  
EPA Region 7  
Air Permits and Compliance Branch  
901 N. 5<sup>th</sup> Street  
Kansas City, KS 66101  
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau  
Iowa Department of Natural Resources  
7900 Hickman Road, Suite #1  
Urbandale, IA 50322  
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

**Field Office 1**

909 West Main – Suite 4  
Manchester, IA 52057  
(563) 927-2640

**Field Office 2**

2300-15th St., SW  
Mason City, IA 50401  
(641) 424-4073

**Field Office 3**

1900 N. Grand Ave.  
Spencer, IA 51301  
(712) 262-4177

**Field Office 4**

1401 Sunnyside Lane  
Atlantic, IA 50022  
(712) 243-1934

**Field Office 5**

401 SW 7<sup>th</sup> Street, Suite I  
Des Moines, IA 50309  
(515) 725-0268

**Field Office 6**

1023 West Madison Street  
Washington, IA 52353-1623  
(319) 653-2135

**Polk County Public Works Dept.**

Air Quality Division  
5885 NE 14th St.  
Des Moines, IA 50313  
(515) 286-3351

**Linn County Public Health Dept.**

Air Pollution Control Division  
501 13th St., NW  
Cedar Rapids, IA 52405  
(319) 892-6000

## V. Appendices

- A. 40 CFR Part 60 Subpart A – General Provisions  
<http://www.tceq.state.tx.us/permitting/air/rules/federal/60/a/ahp.html>
- B. 40 CFR Part 60 Subpart Db –Standards of Performance for Industrial, Commercial, Institutional Steam Generating Unit  
<http://www.tceq.state.tx.us/permitting/air/rules/federal/60/db/dbhp.html>
- C. 40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial, Commercial, and Institutional Steam Generating Unit  
<http://www.tceq.state.tx.us/permitting/air/rules/federal/60/dc/dchp.html>
- D. 40 CFR Part 60 Subpart DD – Standards of Performance for Grain Elevators  
<http://www.tceq.state.tx.us/permitting/air/rules/federal/60/dd/ddhp.html>
- E. 40 CFR Part 63 Subpart A – General Provision  
<http://www.tceq.state.tx.us/permitting/air/rules/federal/63/a/ahp.html>
- F. 40 CFR Part 63 Subpart GGGG – National Emission Standard for Hazardous Air Pollutants: Solvent Extractions for Vegetable Oil Production  
<http://www.tceq.state.tx.us/permitting/air/rules/federal/63/gggg/gggghp.html>
- G. Quality Assurance/Quality Control (QA/QC) for PEM
- H. Consent Decree – Civil Action Number 05-2037JMR/FLN

## QUALITY ASSURANCE/QUALITY CONTROL

The Quality Assurance/Quality Control (QA/QC) program is essential for maintaining the accuracy of the PEM data. The proposed QA/QC program includes frequent (daily and weekly) and less frequent (monthly/quarterly) checks of the protocol. Table 1 shows the proposed inspection schedule.

TABLE 1: BOILER #3 QA/QC PROGRAM

Daily	<p>The boiler supervisor will inspect the PI data collection system to ensure all boiler parameters are being logged and NOx emission rates are being calculated in accordance with the operations monitoring program. Corrective action will be taken immediately in the event of a malfunction. A record of each daily inspection, downtime (when applicable), corrective action, and reasons for downtime will be logged by the operator.</p> <p>The boiler supervisor will ensure that the daily emission report summary is printed out and filed.</p> <p>The computer's hard drive will be backed-up nightly to ensure no significant loss of data or software.</p>
Weekly	The Boiler Supervisor will review the previous week's daily emission reports and ensure that all reports have been properly filed. Missing reports will be reprinted and filed.
Quarterly	The Quarterly Reports will be printed out and reviewed. These reports will be sent in to IDNR with the proper form by the 30 <sup>th</sup> day after the end of the quarter.
Annually	Per manufacturer's specifications, the flue gas flow meter and the boiler in situ O2 monitor will be inspected and calibrated during the annual shutdown.

### Quality Assurance Plan Organization

The organization responsible for implementation of the QA/QC plan is as follows:

Maintain Records/Logs	Boiler Supervisor
Report Preparation	Plant Production Supervisor and TEC
Daily Tasks	Boiler Supervisor
Weekly Checks	Boiler Supervisor
Annual Inspections	Boiler Supervisor and Contractors
Report Review & Submittals	Plant Superintendent

### Spare Parts

The plant will maintain a complete line of spare parts and transmitters for proper operation of the boiler controls and PI data acquisition system.

### QA/QC Plan Review

The plant will review the QA/QC procedures on an annual basis. Based on results of the annual review, the plant will update the QA/QC plan as necessary.

UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA

UNITED STATES, )  
)  
Plaintiff, )  
)  
and the STATES OF ALABAMA, GEORGIA, )  
ILLINOIS, INDIANA, IOWA, MISSOURI, )  
NEBRASKA, NORTH CAROLINA, NORTH )  
DAKOTA, AND OHIO; and the IOWA )  
Counties of LINN and POLK, the OHIO )  
County of MONTGOMERY, and the )  
TENNESSEE County of SHELBY and City of )  
MEMPHIS, )  
)  
)  
Plaintiff-Intervenors, )  
)  
)  
v. )  
)  
CARGILL, INCORPORATED, )  
)  
Defendant. )

Civil Action Number:

**CONSENT DECREE**

**TABLE OF CONTENTS**

**I. JURISDICTION AND VENUE .....3**

**II. APPLICABILITY .....3**

**III. FACTUAL BACKGROUND .....4**

**IV. COMPLIANCE PROGRAM .....6**

**A. INSTALLATION OF CONTROLS AND APPLICABLE EMISSION  
        LIMITS .....6**

**B. DEMONSTRATION OF COMPLIANCE .....16**

**C. RECORDKEEPING AND REPORTING REQUIREMENTS .....23**

**D. PERMITTING .....24**

**V. CIVIL PENALTY .....25**

**VI. STIPULATED PENALTIES .....32**

**VII. RIGHT OF ENTRY .....35**

**VIII. FORCE MAJEURE .....36**

**IX. DISPUTE RESOLUTION .....39**

**X. GENERAL PROVISIONS .....41**

**XI. TERMINATION .....46**

## CONSENT DECREE

WHEREAS, Plaintiff, the United States of America (hereinafter "Plaintiff" or "the United States"), on behalf of the United States Environmental Protection Agency (hereinafter "EPA"), has, simultaneously with lodging of this Consent Decree, filed a Complaint alleging that Cargill, Incorporated (hereinafter "Cargill") commenced construction of a major emitting facility and major modifications of a major emitting facility in violation of the New Source Review ("NSR") requirements at Part C and D of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7470-7492 and 7501-7515, and the regulations promulgated thereunder at 40 C.F.R. Parts 52.21 and 51.165 and State Implementation Plan ("SIP") permitting programs for construction and operation of new and modified stationary sources;

WHEREAS, the United States issued Notices of Violation related to VOC emissions for Cargill's Lafayette, Indiana oilseeds facility on May 2, 2002, Cargill's Bloomington, Illinois oilseeds facility on September 9, 2002, and all nine of Cargill's corn processing facilities on August 12, 2003;

WHEREAS, on September 9, 2003, a Notice of Violation related to VOC emissions was issued to Cargill by the Regional Air Pollution Control Agency for violations associated with its failure to comply with State of Ohio and Montgomery County air pollution control provisions related to permit and emissions control requirements for new sources of air contaminants;

WHEREAS, Notices of Violations related primarily to VOC emissions were issued to Cargill by the state of Nebraska on May 23, 2003, the state of Iowa on August 1, 2003, the Iowa county of Linn on August 1, 2003, and a Notice of Inquiry related primarily to VOC emissions

was issued to Cargill by the Memphis-Shelby County Health Department on September 30, 2003;

WHEREAS, the states of Alabama, Georgia, Illinois, Indiana, Iowa, Missouri, Nebraska, North Carolina, North Dakota, and Ohio; the Iowa counties of Linn and Polk, the Ohio county of Montgomery, and the Tennessee county of Shelby and city of Memphis (hereinafter collectively "Plaintiff-Intervenors"), have filed Complaints in Intervention, joining the claims alleged by the United States;

WHEREAS, Cargill does not admit the violations alleged in the Complaints and the NOV's;

WHEREAS, Cargill has worked cooperatively with the United States and the Plaintiff-Intervenors to structure a comprehensive program that will result in the installation of pollution control equipment and enforceable emission reductions of at least 40,000 tons of allowable air pollution annually from 24 Cargill facilities in 13 states;

WHEREAS, the parties agree that many of the emission reductions under the Consent Decree would not otherwise be required by law;

WHEREAS, the United States, the Plaintiff-Intervenors, and Cargill have agreed that settlement of this action is in the best interest of the parties and in the public interest, will result in air quality improvements, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter; and

WHEREAS, the United States, the Plaintiff-Intervenors, and Cargill consent to entry of this Consent Decree without trial of any issues;

NOW, THEREFORE, without any admission of fact or law, and without any admission of the violations alleged in the Complaints or NOV's, it is hereby ORDERED AND DECREED as follows:

### **I. JURISDICTION AND VENUE**

1. The Complaints state a claim upon which relief can be granted against Cargill under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355. This Court has jurisdiction of the subject matter herein and over the parties consenting hereto pursuant to 28 U.S.C. § 1345 and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c).

### **II. APPLICABILITY**

2. The provisions of this Consent Decree shall apply to and be binding upon the United States, the Plaintiff-Intervenors, and upon Cargill as well as Cargill's officers, employees, agents, successors and assigns for the facilities listed in Appendix A to this Consent Decree. In the event Cargill proposes to sell or transfer a facility subject to this Consent Decree before termination of the Consent Decree for that facility, it shall advise such proposed purchaser or successor-in-interest in writing of the existence of this Consent Decree, and shall send a copy of such written notification by certified mail, return receipt requested, to the EPA Regional Administrator for the region in which the facility is located and the Plaintiff-Intervenor with jurisdiction over the facility (the "Appropriate Plaintiff-Intervenor") before such sale or transfer, if possible, but no later than the closing date of such sale or transfer. Cargill shall provide a copy of the Consent Decree to the proposed purchaser or successor-in-interest. In the event Cargill

sells or otherwise assigns any of its right, title, or interest in a facility subject to this Consent Decree prior to termination of the Consent Decree for that facility, the conveyance shall not release Cargill from any obligation imposed by this Consent Decree for that facility unless the party to whom the right, title or interest has been transferred agrees in writing to fulfill the obligations of this Consent Decree for that facility.

### III. FACTUAL BACKGROUND

3. Cargill is a “person” as defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e), and the federal and state regulations promulgated pursuant to the Act, and is a Delaware corporation with corporate headquarters in Minnesota.

4. Cargill owns and/or operates the corn processing and oilseed processing facilities listed in Appendix A.

5. Cargill’s corn processing and oilseeds processing facilities produce a number of value-added products including vegetable oil, starch, sweeteners, germ, ethanol, and animal feed. Production of these products results in emissions of regulated air pollutants including nitrogen oxides (“NO<sub>x</sub>”), carbon monoxide (“CO”), sulfur dioxide (“SO<sub>2</sub>”), particulate matter (“PM”), volatile organic compounds (“VOCs”) and hazardous air pollutants (“HAPs”).

6. Plaintiffs allege that certain of Cargill’s facilities are “major emitting facilities,” as defined by Section 169(1) of the Act, 42 U.S.C. § 7479(1), and federal, state and local regulations promulgated pursuant to the Act.

7. Cargill, individually and through its trade association, the Corn Refiners Association, voluntarily disclosed to EPA and affected state and local regulatory agencies the existence of unpermitted VOC emissions at its corn processing facilities.

8. Cargill initiated a process to correct permits for VOC emissions for all nine of its corn processing facilities in June and July 2003. Cargill also met with its state and local agencies for all facilities in July, August and September 2003 regarding the permit applications, VOC emissions and evaluation of VOC emission controls.

9. Cargill's two facilities that produce ethanol received PSD permits in 1995 (Eddyville, Iowa) and 1993 (Blair, Nebraska), and have demonstrated compliance with the Best Available Control Technology ("BACT") VOC limits for ethanol-related emission sources (fermentation vents, rectifier vents, stillage evaporators, tank farms and loadouts) in these permits.

10. Cargill's Lafayette, Indiana oilseed processing facility received a PSD permit in 2001 and complies with BACT VOC limits for the facility in this permit.

11. Cargill voluntarily invested more than \$20 million over the past eight years in process unit improvements at its extraction facilities designed to and having the effect of reducing solvent loss and lowering VOC and HAP emissions. These improvements included enhancement of condensation processes at sixteen facilities and installation of vacuum assisted desolventizing systems at Cargill's Bloomington, Illinois and Cedar Rapids West, Iowa facilities.

12. Under the terms of this Consent Decree, Cargill will optimize use of existing solvent recovery systems and commit to enforceable solvent loss rates as specified in this Consent Decree that are consistent with USEPA's most stringent BACT determination for the type of oilseeds processing plant.

13. Cargill worked to develop and voluntarily implemented use of iso-hexane, a non-hazardous air pollutant containing solvent that significantly reduces HAP emissions from extraction processes at many of its extraction facilities.

14. Under the terms of this Consent Decree, Cargill will optimize existing or install new thermal incineration emission control equipment at all feed dryers and carbon furnaces at its corn processing facilities, thereby further reducing VOC and HAP emissions from these units.

#### IV. COMPLIANCE PROGRAM

Program Summary. As set forth in this Part, Cargill shall implement a program of enforceable emissions reductions of SO<sub>2</sub>, CO, NO<sub>x</sub>, and VOCs from its corn processing and oilseeds processing plants listed in Appendix A by at least 40,000 tons per year. This includes approximate reductions of SO<sub>2</sub> of 15,000 tons per year, CO of 16,000 tons per year, NO<sub>x</sub> of 2,500 tons per year, and VOC of 6,500-11,500 tons per year. Cargill shall accomplish the emission reductions through the installation of pollution control technologies and implementation of emission reduction projects in accordance with the schedules set forth in this Consent Decree. Where required, Cargill shall propose new emission limits, and submit permit applications to the applicable permitting authority to incorporate the new limits into federally-enforceable permits for the facility, and shall demonstrate compliance at all times with applicable limits through performance tests, continuous emission or operating parameter monitoring, and recordkeeping.

##### A. INSTALLATION OF CONTROLS AND APPLICABLE EMISSION LIMITS

Cargill shall implement the following Emission Control Plans:

15. Boiler SO<sub>2</sub> Emission Cap. The Plaintiff and Appropriate Plaintiff-Intervenors have reviewed Cargill's responses to Plaintiff's Clean Air Act Section 114 information request regarding the construction, modification, operation and emissions history of Cargill's coal-fired boilers, listed in Appendix B. Based on their review of the information available to Plaintiff and Plaintiff-Intervenors, the Plaintiff and Appropriate Plaintiff-Intervenors have not identified

liability for Cargill for failing to comply with New Source Review and/or Prevention of Significant Deterioration requirements for these sources.

Cargill will submit permit applications to the applicable permitting authority within three years from entry of this Consent Decree that will contain annual SO<sub>2</sub> emission limits for the facilities and boilers listed in Appendix B that, in aggregate, limit total annual SO<sub>2</sub> emissions to less than 15,355 tons per year based on a 12-month rolling sum. This represents a reduction of 15,067 tons of SO<sub>2</sub> per year from the current allowable emissions from these sources of 30,422 tons per year. To accommodate environmentally beneficial fuel switches to lower sulfur coal, these facilities are authorized to make changes to the coal boiler that maintain the heat input capacity of the coal boiler (including changes to coal boiler fuel receiving and handling systems and ash handling systems) that do not result in an increase in any single pollutant's emissions above current boiler allowable emission rates or an increase in the heat input to the boiler and result in an overall decrease in emissions.

16. Additional SO<sub>2</sub> Emission Reduction Commitment. Cargill will submit a permit application to the applicable permitting authority within three years from entry of this Consent Decree that will include individual emission limits for the Cedar Rapids (PC Boiler – 72-CB), Memphis (PC Boiler – 8301) and Decatur (Stoker Boiler – S407) coal boilers that in aggregate will not exceed a capacity weighted average SO<sub>2</sub> emission rate of 1.2 lb/MMBtu. This represents a greater than 44 percent reduction in the pound per million BTU emission rate of SO<sub>2</sub> from the 2003 capacity weighted baseline pound per million BTU emission rate for these boilers of 2.16 lb/MMBtu and a greater than 60 percent reduction from the weighted allowable pound per million BTU emission rate of 3.1 lb/MMBtu.

17. Boiler CO Emission Control Plan. Cargill will undertake and complete the CO emissions reduction and combustion optimization project described in Appendix C within five years from entry of this Consent Decree. After completion of the emissions reduction and combustion optimization project and within five years from entry of this Consent Decree, Cargill shall propose a new CO limit to the applicable permitting authority for the Eddyville coal boilers (EU 1.001, 1.002 and 1.039) of 4,374 tons per year based on a 12-month rolling sum. This represents a reduction of 10,080 tons of CO per year from the current BACT allowable emissions from these boilers of 14,454 tons per year. After completion of the emission reduction and combustion optimization project and within five years from entry of the Consent Decree, to the extent Cargill is unable to achieve the limit of 4,374 tons of CO per year, which is based on a vendor performance guarantee, Cargill shall submit to the applicable permitting authority an alternative CO limit based on the demonstrated operation of boilers following completion of the emission reduction project. By letter of June 14, 2005, IDNR expressly approves this emission reduction and combustion optimization project as a pollution control project (to the extent provided by law) that is exempt from New Source Review requirements and EPA does not object to IDNR's determination.

18. Boiler NO<sub>x</sub> Emission Control Plan. Within the schedule set forth in Appendix D, Cargill will submit permit applications to the applicable permitting authority that will limit NO<sub>x</sub> emissions from the units listed in Appendix D to the emission limits specified in Appendix D through the installation of controls, acceptance of enforceable operating limits and retirement of sources. This represents a reduction of at least 2,500 tons of NO<sub>x</sub> per year from the current allowable emissions from these sources.

19. Extraction VOC Emission Control Plan for Soybean Processing Plants. Cargill will submit permit applications within three years from entry of this Consent Decree that will propose a final VOC solvent loss limit (hereinafter, also referred to as “solvent loss ratio limit” or “SLR limit”) for each conventional soybean oilseed processing facility listed in Appendix E that in aggregate will not exceed a capacity weighted average of 0.175 gallon of VOC solvent loss per ton of oilseed processed (gallon/ton) based on a 12-month rolling average. Beginning three years from the date of entry of the Consent Decree, Cargill shall begin to account for solvent loss and quantity of oilseeds processed to comply with the proposed final solvent loss limit. For each soybean processing plant, the first compliance determination will be based on the first twelve operating months of data collected after the third year from entry of the Consent Decree. For any plant that has an existing permit limit lower than the applicable solvent loss factor (“SLF”) in 40 C.F.R. Part 63, Subpart GGGG, Cargill may not propose a final solvent loss ratio limit that is less stringent than either the existing permit limit or the Solvent Extraction for Vegetable Oil Production NESHAP limit. Capacity weighted averages shall be based on the capacities for each facility as listed in Appendix E. If the design capacity for any plant listed in Appendix E changes anytime within three years from entry of this Consent Decree, Cargill will notify the Plaintiff and the Appropriate Plaintiff-Intervenors as part of the next semi-annual report required under Paragraph 36 submitted after such change occurs. Compliance with the capacity weighted average solvent loss limit shall be demonstrated using the compliance demonstration formula in Appendix E.

20. Extraction VOC Emission Control Plan for Corn Germ and Sunflower Processing Plants. Cargill will submit permit applications within three years from entry of this Consent

Decree that will propose a final VOC solvent loss ratio limit for each corn germ and sunflower processing facility listed in Appendix F that in aggregate will not exceed a capacity weighted average of 0.30 gallon/ton based on a 12-month rolling average. Beginning three years from the date of entry of the Consent Decree, Cargill shall begin to account for solvent loss and quantity of oilseeds processed to comply with the proposed final solvent loss limit. For each corn germ and sunflower processing plant, the first compliance determination will be based on the first twelve operating months of data collected after the third year from entry of the Consent Decree. For any plant that has an existing permit limit lower than the applicable solvent loss factor (“SLF”) in 40 C.F.R. Part 63, Subpart GGGG, Cargill may not propose a final VOC SLR limit that is less stringent than either the existing permit limit or the Solvent Extraction for Vegetable Oil Production NESHAP limit. Capacity weighted averages shall be based on the capacities for each facility as listed in Appendix F. If the design capacity for any plant listed in Appendix F changes anytime within three years from entry of this Consent Decree, Cargill will notify the Plaintiff and the Appropriate Plaintiff-Intervenors as part of the next semi-annual report required under Paragraph 36 submitted after such change occurs. Compliance with the capacity weighted average solvent loss limit shall be demonstrated using the compliance demonstration formula in Appendix F.

21. Extraction VOC Emission Control Plan for Specialty Processing Plants. Cargill will submit permit applications within three years from entry of this Consent Decree that will limit total solvent loss from the oilseed specialty facilities listed in Appendix G to the gallon/ton final VOC solvent loss ratio limits established in Appendix G for each facility based on a 12-month rolling average. Beginning three years from the date of entry of the Consent Decree,

Cargill shall begin to account for solvent loss and quantity of oilseeds processed to comply with the gallon/ton solvent loss limits established in Appendix G for each facility on a twelve month rolling average. For each specialty processing plant, the first compliance determination will be based on the first twelve operating months of data collected after the third year from entry of the Consent Decree.

22. Interim Solvent Loss Ratios. Beginning 90 days after lodging of this Consent Decree, Cargill will demonstrate compliance with the applicable solvent loss ratio for one facility included in Appendix G (Extraction VOC Emission Control Plan – Specialty Plants). Beginning 12 months after one year from entry of this Consent Decree, Cargill will meet for a minimum of five extraction facilities (listed on Appendices E and F) a weighted solvent loss average of 0.175 gallon/ton (for selected soybean processing plants in Appendix E), or 0.3 gallon/ton (for selected corn germ or sunflower processing plants in Appendix F) on a 12-month rolling average. Beginning 12 months after two years from entry of this Consent Decree, Cargill will meet for a minimum of ten extraction facilities (listed on Appendices E and F) a weighted solvent loss average of 0.175 gallon/ton (for selected soybean processing plants in Appendix E), or 0.3 gallon/ton (for selected corn germ or sunflower processing plants in Appendix F) on a 12-month rolling average.

23. Corn Processing VOC Emission Control Plan for Process VOC Sources. Cargill, through the installation of pollution control technologies and implementation of emission reduction projects (including emission unit elimination and heat recovery) will meet the level of control specified for the emission units included in Appendix H within the schedule established in Appendix H. Thermal oxidizers installed after lodging and according to the requirements of

this Consent Decree on emission units included in Appendix H located in ozone non-attainment areas (Dayton, Hammond, Memphis), will be designed to achieve at least 98 percent control of VOC emissions and will meet the level of control specified in Appendix H within the schedule established in Appendix H. Within five years from lodging of this Consent Decree, Cargill shall submit permit applications to the applicable permitting authority to incorporate the new VOC limits for emission units in Appendix H into federally enforceable permits for the facilities.

24. Corn Processing VOC Emission Control Plan for Integrated Feed/Bran Drying Systems. For integrated feed/bran drying systems listed in Appendix I, Cargill will optimize existing pollution control equipment (thermal oxidizers and scrubbers) and implement emission reduction projects (including emission unit elimination and heat recovery) to meet pollution control equipment operating parameters set forth in Appendix I or eliminate the emission unit within three years from lodging of this Consent Decree. Also within three years from lodging of this Consent Decree, Cargill will test and establish an allowable short-term VOC emission limit at the outlet of each scrubber stack, as set forth in Appendix I, for each integrated feed/bran drying system. Within five years from lodging of this Consent Decree, Cargill shall submit permit applications to the applicable permitting authority to incorporate the pollution control equipment operating parameters and allowable short-term VOC emission limits for integrated feed/bran drying systems listed in and established pursuant to Appendix I into federally enforceable permits.

25. Corn Processing VOC Emission Control Plan – Dayton Facility. Within five years from lodging of this Consent Decree, Cargill will submit a permit to install application (“PTI”) to the Regional Air Pollution Control Agency in Dayton, Ohio that will limit process

source VOC and boiler NO<sub>x</sub> emissions from the group of sources listed in Appendix J (Dayton, Ohio Corn Processing Ozone Cap) to less than 854 tons per year based on a 12-month rolling sum. The 854 ton per year ozone cap reflects enforceable NO<sub>x</sub> emissions offsets of 404 tons per year for the three boiler emissions units in Appendix J and 98 percent VOC control for the process units identified in Appendix J. The PTI application shall also propose to install new thermal incineration emission control technology designed to achieve VOC destruction efficiency of not less than 98 percent to minimize VOC emissions for the process operations identified in Appendix H as emissions units P031, P052, P057, P072 and P088. The PTI application shall also propose to optimize the control devices listed in Appendix I to meet the equipment design and operational parameters established in Appendix I to minimize VOC emissions from the integrated feed/bran drying system identified as emissions units P032, P033, P034, P037, P040, and P058. Pursuant to the emission test procedures and schedule specified in Appendix J, allowable short-term VOC emission rates shall be established for the process VOC emission units identified in Appendix J. Such allowable short-term VOC emission rates shall be proposed as part of the PTI application. Compliance with the facility ozone cap and short term VOC emission limits established pursuant to this paragraph and Appendix J satisfies the requirement to meet the Lowest Achievable Emission Rate of 98 percent. The PTI application shall also propose to install low-NO<sub>x</sub> burner control technology for the two boilers identified in Appendix J as B004 and B006. The low-NO<sub>x</sub> burner control technology shall result in the short-term and annual emissions rates of NO<sub>x</sub> specified in Appendix D. Within one year of issuance of the Permit to Install, Cargill shall submit an application to incorporate the provisions of the PTI into the Title V operating permit.

Within one year from lodging of this Consent Decree, Cargill shall complete, and submit to RAPCA, an odor control optimization analysis report. The report shall include identification/speciation of potentially odorous volatile organic compounds expected to be emitted from emission units located at Cargill's Dayton, Ohio corn processing facility and subject to VOC control under Appendix H of this Consent Decree. Identification/speciation of potentially odorous compounds shall be based on review of past emissions testing and analysis at Cargill's facilities, third-party expert consultation, and reasonable review of available literature and information. The odor control optimization analysis report also shall include analysis and recommendations by a third-party expert regarding how controls mandated by the Consent Decree may be operated in a manner to reduce odor to the maximum extent practicable. Specifically, the report shall evaluate and provide recommendations regarding thermal oxidizer residence time between 0.5 and 1.0 second, thermal oxidizer operating temperature between 1200 degrees F and 1500 degrees F, and zero-hearth furnace operating temperatures between 1200 degrees F and 1500 degrees F. In making these recommendations, the third-party expert shall consider effectiveness on odor control, economic feasibility, and the potential for collateral emissions increases. In any permit applications required under this Consent Decree, for the emission units subject to VOC control under Appendix H of this Consent Decree, Cargill shall propose the operating parameters recommended by the third-party expert in the odor control optimization analysis report. Compliance with the operating parameters established pursuant to this paragraph and Appendix I shall be sufficient for purposes of compliance with Ohio Administrative Code Rule 3745-15-07(A).

26. Corn Processing Process Source CO Emission Control Plan. Cargill, through the installation of pollution control technologies and implementation of emission reduction projects (including emission unit elimination and heat recovery) will meet the level of control specified for the sources included in Appendix K within the schedule established in Appendix K. Within five years from lodging of this Consent Decree, Cargill shall submit permit applications to the applicable permitting authority to incorporate the new CO limits for sources in Appendix K into federally enforceable permits for the facilities.

27. Hammond Process Source SO<sub>2</sub> Emission Control Plan. Cargill, through installation of pollution control technologies and implementation of emission reductions projects (including emission unit elimination) will meet the level of control specified for the sources included in Appendix L within three years from entry of this Consent Decree. Also within three years from entry of this Consent Decree, Cargill will submit to IDEM a formal request to amend Rule 326 IAC 7-4-1.1 to incorporate the new SO<sub>2</sub> emission limits for sources in Appendix L into this Rule.

28. Installation of air pollution control equipment and emission reduction projects undertaken pursuant to the emission control plans under Paragraphs 15-27 are intended to abate or control atmospheric pollution or contamination by removing, reducing, or preventing the emission of pollutants, and as such, are environmentally beneficial projects and are pollution control projects to the extent provided by law.

29. Additional Federal Requirements. Upon entry of this Consent Decree, for all facilities included in Appendix A, Cargill shall identify and implement applicable New Source Performance Standards (“NSPS”) requirements codified at 40 C.F.R. Part 60. The following

NSPS may apply: Subparts D, Db and Dc (certain steam generating units), DD (certain grain elevators), Kb (certain organic liquid storage tanks), GG (certain stationary gas turbines) VV (certain synthetic organic chemical manufacturing equipment) and Y (certain coal preparation plants). Within 12 months from the date of entry of this Consent Decree, Cargill shall file an amended Toxics Release Inventory form (Form R) for the corn processing facilities listed in Appendix A to include all identified chemicals. Within 90 days from the date of entry of this Consent Decree, Cargill shall comply with any notification and reporting requirements under CERCLA Section 304, 42 U.S.C. § 11004.

B. DEMONSTRATION OF COMPLIANCE

30. Cargill shall demonstrate compliance with the requirements of Paragraphs 15-29 through the use of performance testing, continuous emission monitoring, parametric monitoring, recordkeeping and reporting, as set forth below:

a. Coal Boiler SO<sub>2</sub> Emission Reductions. Cargill shall demonstrate compliance with the aggregate 12-month rolling sum of 15,355 tons of SO<sub>2</sub> per year for coal boilers listed in Appendix B beginning 12 months after the third year from entry of the Consent Decree by compliance with the 12-month rolling sum limits established in individual permits pursuant to Paragraph 15. Monitoring of emissions will be as provided in Appendix B (Boiler SO<sub>2</sub> Emission Control Plan). Cargill shall demonstrate that the individual facility permit limits comply with the combined SO<sub>2</sub> capacity weighted average of 1.2 lb/MMBtu established pursuant to Paragraph 16 (Additional SO<sub>2</sub> Emission Reduction Commitment) using the compliance formula set forth in Appendix B, note 2. Where coal boiler exhaust is commingled with exhaust from other sources,

compliance with this limit will be based on emissions from only the coal boilers, provided that Cargill can accurately quantify the coal boiler emissions. Cargill shall monitor emissions as provided in Appendix B (Boiler SO<sub>2</sub> Emission Control Plan).

b. Boiler CO Emission Reductions. Cargill shall demonstrate compliance with the 12-month rolling sum of 4,374 tons of CO per year, or the alternative limit proposed under Paragraph 17, from the Eddyville coal boilers (EU 1.001, 1.002 and 1.039) beginning 12 months after the fifth year from entry of the Consent Decree. Cargill shall monitor emissions as provided in Appendix C (Boiler CO Emission Control Plan).

c. Boiler NO<sub>x</sub> Emission Reductions. Within the schedule set forth in Appendix D (Boiler NO<sub>x</sub> Emission Control Plan), Cargill shall demonstrate compliance with coal and gas boiler NO<sub>x</sub> emission limits established pursuant to Appendix D. Cargill shall monitor emissions as provided in Appendix D, and shall conduct performance testing as provided in Appendix M (Performance Testing Plan).

d. Extraction VOC Emissions Reductions. Beginning 12 months after the first year from entry of this Consent Decree, Cargill will demonstrate at a minimum of five extraction facilities (listed on Appendices E and F) compliance with a weighted solvent loss average of 0.175 gallon/ton (for selected soybean processing plants in Appendix E), or 0.3 gallon/ton (for selected corn germ or sunflower processing plants in Appendix F) on a 12-month rolling average. Beginning 12 months after the second year from entry of this Consent Decree, Cargill will demonstrate at a minimum of ten extraction facilities compliance with a weighted solvent loss average of 0.175 gallon/ton (for selected soybean processing plants in Appendix E), or 0.3 gallon/ton (for selected

corn germ or sunflower processing plants in Appendix F) on a 12-month rolling average. Beginning 12 months after the third year from entry of the Consent Decree, Cargill will demonstrate compliance with applicable solvent loss ratios for all facilities included under Appendices E (Oilseeds Extraction VOC Emission Control Plan—Soybean Processing Plants), F (Extraction VOC Emission Control Plan—Corn Germ and Sunflower Processing Plants) and G (Extraction VOC Emission Control Plan—Specialty Processing Plants).

Compliance with the solvent loss ratio limits established pursuant to Paragraphs 19-22 shall be calculated on a monthly basis and determined in accordance with 40 C.F.R. Part 63, Subpart GGGG, with the following exceptions: (1) provisions pertaining to HAP content shall not apply; (2) solvent losses and quantities of oilseeds processed during startup and shutdown periods shall not be excluded in determining solvent losses; and (3) records shall be kept in the form of the table in Attachment N (Extraction Solvent Loss Recordkeeping Template), that show total solvent losses, solvent losses during malfunction periods, and adjusted solvent losses (i.e., total solvent losses minus malfunction losses) monthly and on a twelve month rolling average basis. Cargill may apply the provisions of 40 C.F.R. Part 63, Subpart GGGG pertaining to malfunction periods only when: (i) the malfunction results in a shutdown of the solvent extraction system; and (ii) cumulative solvent losses during malfunction periods at a plant do not exceed 4,000 gallons in a 12-month rolling period.

e. Corn Processing VOC Emission Reductions.

i. Process VOC Sources. As stated in Paragraph 23, within the schedule established in Appendix H (Corn Processing VOC Emission Control Plan), Cargill will meet the level of control specified for the sources included in Appendix H. Cargill will monitor controls and emissions as provided in Appendix H and will conduct performance testing as provided in Appendix M (Performance Testing Plan) and, where applicable, Appendix O (Carbon Furnace Test Protocol).

ii. Integrated Feed/Bran Drying Systems. As stated in Paragraph 24, within three years from lodging of the Consent Decree, Cargill will monitor and demonstrate compliance with control equipment operating parameters established under Appendix I as set forth under Appendix I. Also, within three years from lodging of the Consent Decree, Cargill will monitor control equipment and conduct testing as provided in Appendices I and M (Performance Testing Plan).

iii. Dayton Corn Processing Ozone Cap. As stated in Paragraph 25, Cargill will demonstrate compliance with the Dayton Corn Processing Ozone Cap, which reflects enforceable NO<sub>x</sub> emissions offsets of 404 tons per year for the three boiler emission units in Appendix J and 98 percent VOC control for the process units identified in Appendix J, via the emission tracking mechanism provided in Appendix J. Such VOC and NO<sub>x</sub> emission tracking shall begin the fifth year from lodging of the Consent Decree. Cargill shall demonstrate compliance with the 12-month rolling sum ozone cap of 854 tons for the process

source VOC and boiler NO<sub>x</sub> emission sources listed in Appendix J during the first 11 months following the fifth year from lodging of the Consent Decree as per the schedule in Appendix J. Cargill will track VOC and NO<sub>x</sub> emissions as provided in Appendix J (Dayton, Ohio Corn Processing Ozone Cap). NO<sub>x</sub> emissions will be continuously monitored as provided in Appendices D (Boiler NO<sub>x</sub> Emission Control Plan) and J (Dayton, Ohio Corn Processing Ozone Cap). To monitor VOC emissions, Cargill will develop and utilize VOC emission factors via performance testing as provided in Appendices J (Dayton, Ohio Corn Processing Ozone Cap) and M (Performance Testing Plan).

iv. Dayton, Ohio Odor Control Optimization Analysis. Within one year from lodging of this Consent Decree, Cargill shall complete, and submit to RAPCA, an odor control optimization analysis report for emission units subject to VOC control under Appendix H as required under Paragraph 25. Within five years from the date of lodging of this Consent Decree, Cargill shall implement the odor report recommendations for the emission units subject to VOC control under Appendix H.

v. Hammond, Indiana RACT Plan. Within five years from the date of lodging of this Consent Decree, Cargill shall submit the emission limits established pursuant to Paragraphs 23 and 24 and Appendices H and I as an amendment to the Hammond, Indiana facility's RACT plan; IDEM shall incorporate the emission limits into the RACT plan.

f. Corn Processing Process Source CO Emission Reductions. As stated in Paragraph 26, within the schedule established in Appendix K, Cargill will meet the level of control specified for the sources included in Appendix K (Corn Processing Process CO Emission Control Plan). Controls and emissions will be monitored as provided in Appendix K and performance testing will occur as provided in Appendix M (Performance Testing Plan) and, where applicable, Appendix O (Carbon Furnace Test Protocol).

g. Hammond Process Source SO<sub>2</sub> Emission Reductions. As stated in Paragraph 27, within three years from entry of this Consent Decree, Cargill will meet the level of control specified for the sources included in Appendix L (Hammond Process Source SO<sub>2</sub> Emission Control Plan). Controls and emissions will be monitored as provided in Appendix L and performance testing will occur as provided in Appendix M (Performance Testing Plan).

31. Continuous Emission Monitors Use and Certification. For all new Continuous Emission Monitors (“CEMs”) installed after entry and pursuant to this Consent Decree, Cargill shall install, calibrate and certify the CEMs and begin to continuously monitor emissions sufficient to meet the compliance schedules specified in Paragraph 30 and related appendices. Cargill shall thereafter continuously maintain and operate each CEM as specified in Appendices B-D.

32. Source Testing. Cargill shall conduct source testing to evaluate compliance with applicable requirements of this Consent Decree, as required under Appendix M. For each performance test that determines initial compliance or demonstration of emission limits with requirements under Appendices H and I, the performance test shall be conducted in accordance

with a protocol approved by Plaintiff and Appropriate Plaintiff-Intervenors. Testing for compliance or demonstration of emission limits for all other instances shall be conducted in accordance with a protocol approved by the Appropriate Plaintiff-Intervenors. During the source testing, all emission units shall be operated at maximum representative operating conditions. During the source testing, Cargill shall monitor, at a minimum, the operating parameters specified by Appendices B-L.

33. Initial Emissions Report. No later than 60 days after the completion of the source testing required pursuant to this Consent Decree, Cargill shall submit an Initial Emissions Report to the Plaintiff and Appropriate Plaintiff-Intervenors. This report shall include, where applicable, the source test report or a summary of emission monitoring data; Cargill's proposed emission limit as required by the emission control plans under Paragraphs 15-27; and the operating parameter(s) ranges or limits that Cargill proposes to monitor for compliance demonstration as required under this Consent Decree or Appendices B-L.

34. Proposed and Final Emission Limits. The Plaintiff and Appropriate Plaintiff-Intervenor shall set the final emission limit, and operating parameter ranges or limits, as appropriate and consistent with the provisions of this Consent Decree, taking into consideration Cargill's Initial Emissions Report under Paragraph 33, process variability, test methodology, a reasonable certainty of compliance and any other information pertinent to the specific emission unit. Cargill shall comply with the proposed emission limit immediately following submission of the Initial Report and shall comply with the Final Limit no later than 60 days following Cargill's receipt of notice from the Plaintiff and Appropriate Plaintiff-Intervenors regarding the Final Limit.

C. RECORDKEEPING AND REPORTING REQUIREMENTS

35. Data Retention. Cargill shall conduct monitoring as required by the Emission Control Plans and Paragraphs 30(a)-30(g), and shall maintain records of this monitoring data in accordance with the record retention requirements set forth in Paragraph 37.

36. Semi-annual Reports. Cargill shall submit semi-annual written reports to the Plaintiff and Plaintiff-Intervenors that describe Emission Control Plan requirements, the applicable deadlines and the dates the tasks were completed. Each report shall also contain i) any deviations from emission limitations, operational restrictions, performance testing requirements and control device operating parameter limitations, including deviations resulting from malfunctions, that have been detected by the testing, monitoring, and recordkeeping requirements specified in this Consent Decree; ii) the probable cause of such deviations; and iii) any corrective actions or preventive measures taken. If no deviations occurred during a reporting period, Cargill shall submit a written report which states that no deviations occurred. Each report shall be due within thirty days after the end of each semi-annual reporting period (January 1 through June 30, or July 1 through December 31, as applicable, except the first report where the reporting period is from the date of lodging of this Consent Decree through December 31, 2005). Reports shall be submitted as set forth in Paragraph 84 (Notice and Penalty Payment). Emissions data may be submitted in electronic format unless otherwise requested by the Appropriate Plaintiff-Intervenor.

37. Cargill shall retain records required by Paragraphs 15-30 of this Consent Decree for a period of five years unless other state or local regulations require the records to be maintained longer.

38. Cargill's semi-annual reports shall contain the following certification and may be signed by the company employees responsible for corn and oilseed processing environmental management and compliance:

"I certify under penalty of law that I have personally examined the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

D. PERMITTING

39. Within the schedules specified in Paragraphs 15-27 of the Consent Decree, Cargill shall apply for modification of its federally-enforceable construction and/or operating permits to incorporate the specific emission reduction requirements, emission limits, operating parameters, performance testing requirements, monitoring requirements and recordkeeping requirements specified under Paragraphs 15-27. It is the intent of the parties that the requirements under Paragraphs 15-27 and associated appendices survive termination of this Consent Decree and are deemed "applicable requirements" under Title V of the Clean Air Act and state and local operating permit programs that implement the requirements of Title V. EPA, states and local agencies agree to propose as permit conditions, and may propose as revisions to their SIPs, the specific emission limits, operating parameters, monitoring requirements and recordkeeping requirements set forth under Paragraphs 15-27 and associated appendices, and as proposed by Cargill under Paragraphs 15-27 so long as Cargill's proposal is consistent with Consent Decree emission reduction requirements. Cargill agrees not to contest any such permit conditions or SIP revisions. For emission reduction projects necessary to meet the requirements of Paragraphs 15-

28 and 30 of this Consent Decree, Cargill, as necessary, shall apply for modification of its federally-enforceable operating permits to incorporate revised emission limits for any collateral emissions increases resulting from implementation of such emission reduction projects within the schedules specified in Paragraphs 15-28 of the Consent Decree for permitting of such projects. For units and pollutants not addressed by the emission reduction programs under Paragraphs 15-27 of this Consent Decree, Cargill shall have a period of 3 years from the date of lodging of the Consent Decree to apply for a permit or permit amendment to impose or modify the VOC, HAP or CO emission limits for the sources included in Appendix A. Prior to issuance of revised construction and/or operating permits that incorporate Consent Decree requirements, Cargill shall operate all units identified in Paragraphs 15-28 of this Consent Decree and associated appendices in accordance with the provisions of Paragraphs 15-28 and 30 of this Consent Decree and associated appendices.

#### **V. CIVIL PENALTY**

40. Within thirty (30) calendar days of entry of this Consent Decree, Cargill shall pay to the United States and Plaintiff-Intervenors a total civil penalty pursuant to Section 113 of the Act, 42 U.S.C. § 7413 in the amount of \$1,600,000. The Plaintiffs agree that to the extent the emission reduction projects required in this Consent Decree result in emission reductions not otherwise required by law, they have been considered environmentally beneficial projects for civil penalty mitigation.

41. Of the total civil penalty, \$830,769 shall be paid to the United States by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number and DOJ Case Number, and

the civil action case name and case number. The costs of such EFT shall be Cargill's responsibility. Payment shall be made in accordance with instructions provided to Cargill by the Financial Litigation Unit of the U.S. Attorney's Office. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. Cargill shall provide notice of payment, referencing the USAO File Number and DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA, as provided in Paragraph 84 (Notice and Penalty Payment).

42. Of the total civil penalty, \$769,231 shall be divided among the state and local air authorities that have filed Complaints in Intervention and joined the claims alleged by the United States in this action. Cargill shall make payment as follows:

- a) \$61,538 to the State of Alabama;
- b) \$30,769 to the State of Georgia;
- c) \$30,769 to the State of Illinois;
- d) \$61,538 to the State of Indiana;
- e) \$123,082 to the State of Iowa;
- f) \$92,307 to Linn County, Iowa;
- g) \$30,769 to Polk County, Iowa;
- h) \$30,769 to the State of Missouri;
- i) \$61,538 to the State of Nebraska;
- j) \$61,538 to the State of North Carolina;
- k) \$61,538 to the State of North Dakota;
- l) \$30,769 to the State of Ohio;

m) \$30,769 to Montgomery County, Ohio; and

n) \$61,538 to the City of Memphis and Shelby County, Tennessee.

Payment shall be made as provided in Paragraph 84 (Notice and Penalty Payment).

43. Upon entry of this Consent Decree, this Consent Decree shall constitute an enforceable judgment for purposes of post-judgment collection in accordance with Rule 69 of the Federal Rules of Civil Procedure, the Federal Debt Collection Procedure Act, 28 U.S.C. § 3001-3308, and other applicable federal authority. The Plaintiff shall be deemed a judgment creditor for purposes of collection of any unpaid amounts of the civil and stipulated penalties and interest.

44. No amount of the total civil penalty of \$1,600,000 to be paid by Cargill shall be used to reduce its federal or state tax obligations.

45. Supplemental Environmental Projects. By no later than five years from entry of this Consent Decree, Cargill shall complete implementation of the Supplemental Environmental Projects (“SEPs”) identified in Appendix P (Supplemental Environmental Projects) (hereinafter, “Appendix P SEPs”) at an aggregate cost of at least \$3,000,000, in accordance with the requirements of Paragraphs 46-48.

46. Within one year from entry of this Consent Decree, Cargill shall provide Plaintiff and Plaintiff-Intervenors with a work plan that provides the proposed schedule for commencing and completing construction of the Appendix P SEPs. The work plan submitted under this paragraph is incorporated by reference herein and made directly enforceable under the Consent Decree.

47. Semi-annual reports, as required under Paragraph 36, shall include a description of work undertaken to implement the Appendix P SEPs and an accounting of all costs incurred in implementing the Appendix P SEPs. Cargill shall provide, upon request, copies of invoices, receipts, purchase orders or other documentation of costs incurred to implement the Appendix P SEPs.

48. Within five years from entry of this Consent Decree, Cargill shall provide an Appendix P SEP completion report to Plaintiffs that documents the dates each project was completed, results of implementing the project (including energy and emission reductions), and project dollars expended by Cargill in implementing the projects.

49. Community-Based Supplemental Environmental Projects. By no later than five years from entry of this Consent Decree, Cargill shall complete implementation of the Community-Based SEPs identified below at an aggregate cost of at least \$500,000:

- a. Mid-South Clean Air Coalition Diesel Retrofit program in Shelby County, TN;
- b. Eddyville Dunes and Wetland Restoration Project in Eddyville, IA;
- c. Cedar Rapids, IA Indian Creek Nature Center Wetlands Restoration Project;
- d. Nebraska-Missouri River Wetland Reserve Enhancement Program; and
- e. Such additional or alternative Community-Based SEPs as Cargill may propose, subject to Plaintiff's approval.

The implementation of the Community-Based SEPs shall be deemed complete upon Cargill's expenditure of at least \$500,000 in accordance with the work plan approved pursuant to Paragraph 50.

50. Within one year from entry of this Consent Decree, Cargill shall provide to Plaintiff and Plaintiff-Intervenors, for review and approval, a detailed work plan that provides the proposed schedule for commencing and completing the Community-Based SEPs identified above, as well as describing the nature, scope and goals of the projects, and where they are to be implemented. Cargill, subject to Plaintiff's approval, may propose an alternative or additional Community-Based SEP. Cargill's Community-Based SEP work plans shall be approved by the Plaintiff and Appropriate Plaintiff-Intervenors provided they conform to the requirements of EPA's Supplemental Environmental Projects Policy (eff. May 1, 1998).

51. Community-Based SEP Completion Report. For the Community-Based SEPs completed under this Section during a particular semiannual period, Cargill shall provide, as part of the semiannual report for that period, a Community-Based SEP Completion Report certified in accordance with Paragraph 38 of this Consent Decree and containing the following information:

- a. A detailed description of the Community-Based SEP as implemented;
- b. A description of any pre-report implementation problems encountered and the solutions thereto;
- c. An accounting of all costs incurred by Cargill for the purpose of implementing the Community-Based SEP. Cargill shall provide, upon request, copies of the invoices, receipts, purchase orders, or other documentation that specifically identifies and itemizes the individual cost

or the goods and/or services for which payment is being made. Canceled drafts do not constitute acceptable documentation unless such drafts specifically identify and itemize the individual costs of the goods and/or services for which payment is being made; and

- d. A certification that the Community-Based SEP has been satisfactorily completed which is signed by the company employees responsible for corn and oilseed processing environmental management and compliance.

52. Acceptance of Community-Based SEP Completion Report. After receipt of the Community-Based SEP Completion Report described in Paragraph 51 above, the Plaintiff and Appropriate Plaintiff-Intervenors will notify Cargill, in writing, regarding: (a) any deficiencies in the Community-Based SEP Completion Report along with a grant of an additional thirty (30) days for Cargill to correct any deficiencies; or (b) indicate that the Plaintiff and Appropriate Plaintiff-Intervenors conclude that the project has been completed satisfactorily; or (c) determine that the project has not been completed satisfactorily and seek stipulated penalties in accordance with Paragraph 57 herein.

53. If the Plaintiff and Appropriate Plaintiff-Intervenors elect to exercise option (a) above, i.e., if the Community-Based SEP Completion Report is determined to be deficient but Plaintiffs and Appropriate Plaintiff-Intervenors have not yet made a final determination about the adequacy of Community-Based SEP completion itself, Cargill shall have the opportunity to object in writing to the notification of deficiency given pursuant to this paragraph within ten (10) days of receipt of such notification. The Plaintiffs and Appropriate Plaintiff-Intervenors and Cargill shall have an additional thirty (30) days from the receipt of the Plaintiffs and Appropriate

Plaintiff-Intervenors notification of objection to reach agreement on changes necessary to the Community-Based SEP Completion Report. If agreement cannot be reached on any such issue within this thirty (30) day period, the Plaintiff and Appropriate Plaintiff-Intervenors shall provide a written statement of their decision on the adequacy of the completion of the Community-Based SEP to Cargill.

54. If for any reason Cargill expends less than the full amount in Paragraphs 45 (Appendix P SEPs) or 49 (Community-Based SEPs), Cargill shall pay the balance of the unexpended funds in accordance with the payment requirements set forth in Paragraph 41, within thirty (30) days of receipt of written notification of the unexpended funds from the United States.

55. In any public statement regarding the funding of Appendix P SEPs or Community-Based SEPs implemented under this Consent Decree, Cargill shall clearly indicate that these projects are being undertaken as part of the settlement of an enforcement action for alleged environmental violations. Cargill shall not be able to use or rely on any emissions reductions generated as a result of its performance of the Appendix P SEPs or Community-Based SEPs in any federal or state emission averaging, banking, trading or netting program.

56. These Paragraphs 45-55 shall not relieve Cargill of its obligation to comply with all applicable provisions of federal, state or local law during the implementation of the Appendix P SEPs or Community-Based SEPs, nor shall they be construed to be a ruling on, or determination of, any issue related to any federal, state or local permit, nor shall they be construed to constitute Plaintiffs approval of the equipment or technology installed by Cargill in connection with the Appendix P SEPs or Community-Based SEPs undertaken pursuant to this Consent Decree.

## VI. STIPULATED PENALTIES

57. Cargill shall pay stipulated penalties in the amounts set forth below to the Plaintiff for violations of the Consent Decree. When a violation of the Consent Decree is at a specific facility, Cargill shall divide the stipulated penalty set forth below equally among the Plaintiff and the Appropriate Plaintiff-Intervenors for the following:

a. For failure to comply with a proposed emission limit under Paragraphs 15-29 (other than, for proposed emission limits under Paragraphs 23-26, startup, shutdown or malfunction events as defined in 40 C.F.R. Part 63), per day, per unit:

For one through three days per calendar month - \$1,500  
For four through ten days per calendar month - \$2,500  
For greater than 10 days per calendar month - \$5,000

b. For failure to monitor operating parameters for pollution control equipment established under Paragraphs 15-29, per day, per calendar quarter, per device not monitored:

For four to ten days per calendar quarter - \$1,500  
For eleven through twenty days per calendar quarter - \$2,500  
For greater than twenty days per calendar quarter - \$3,750

c. For failure to operate air pollution control devices within parameters as established under Paragraphs 15-29 (other than, for parameters as established under Paragraphs 23-26, startup, shutdown or malfunction events as defined in 40 C.F.R. Part 63), per day, per device:

For two to six days per calendar month - \$1,500  
For seven through twelve days per calendar month - \$2,500  
For greater than twelve days per calendar month - \$3,750

d. For failure to meet the 12-month rolling average solvent loss ratio limits established pursuant to Paragraphs 19-22:

For each exceedance of a 12-month rolling average - \$30,000

e. For failure to install CEMs on sources pursuant to Paragraphs 30(a)-(c) and Appendices B, C and D, per a CEM not timely installed:

For first full month of delay - \$2,500

For each subsequent month and fraction thereof - \$2,500

f. For failure to certify CEMs pursuant to Paragraphs 30(a)-(c) and Appendices B, C and D, per a CEM not certified:

For first full month of delay - \$2,500

For each subsequent month and fraction thereof - \$2,500

g. For failure to operate CEMs pursuant to Paragraphs 30(a)-(c) and Appendices B, C and D, per CEM not operated, \$100 per day.

h. For failure to apply for permits incorporating emission limits as required by Paragraphs 15-28, \$1,000 per the first full week of delay, and \$1,000 per each subsequent week of delay, or fraction thereof.

i. For failure to preserve records as specified in Paragraph 37 of the Consent Decree:

Per record not retained per day: \$500

j. For failure to conduct a compliance test as required by Paragraph 30, per day, per unit:

1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1,000
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$2,000
Beyond 60 <sup>th</sup> day	\$5,000

k. For failure to complete the CO emission reduction project required under Paragraph 17, \$1,000 per a day.

l. For failure to submit a semi-annual report required by Paragraph 36 of this Consent Decree, per day:

1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$200
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$500
Beyond 60 <sup>th</sup> day	\$1,000

m. For failure to notify the Plaintiffs of Cargill's sale or transfer of a facility pursuant to Paragraph 2, \$250 per day.

n. For failure to pay the civil penalty as specified in Section V of this Consent Decree, Cargill shall pay an additional \$30,000 per week that full payment is delayed plus interest on the amount overdue at the rate specified in 31 U.S.C. § 3717.

o. For failure to satisfactorily complete implementation of the Appendix P SEPs or Community-Based SEPs as required under Paragraphs 45 and 49, Cargill shall pay the shortfall as provided in Paragraph 54 and pay a stipulated penalty of \$50,000, each.

p. For failure to submit each of the proposed work plans required by Paragraphs 46 and 50, or each of the completion reports required by Paragraphs 48 and 51 of the Consent Decree, per day:

1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1,000
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$2,000
Beyond 60 <sup>th</sup> day	\$3,000

q. For failure to escrow stipulated penalties as required by Paragraph 59, \$1,425 per day.

58. Cargill shall pay stipulated penalties upon written demand by the Plaintiff and the Plaintiff-Intervenors no later than thirty (30) days after Cargill receives such demand. Stipulated penalties shall be paid to the Plaintiff and the Plaintiff-Intervenors as provided in Paragraphs 57 and 84 (Notice and Penalty Payment) of this Consent Decree.

59. Should Cargill dispute its obligation to pay part or all of a stipulated penalty, it may avoid the imposition of the stipulated penalty for failure to pay a penalty due to the Plaintiff and the Plaintiff-Intervenors by placing the disputed amount demanded by the Plaintiff and the Plaintiff-Intervenors, not to exceed \$30,000 for any given event or related series of events at any one plant, in a commercial escrow account pending resolution of the matter and by invoking the Dispute Resolution provisions of Part IX within the time provided in Paragraph 58 for payment of stipulated penalties. If the dispute is thereafter resolved in Cargill's favor, the escrowed amount plus accrued interest shall be returned to Cargill. Otherwise the Plaintiff and Plaintiff-Intervenors shall be entitled to the escrowed amount that was determined to be due by the Court plus the interest that has accrued on such amount, with the balance, if any, returned to Cargill.

60. The Plaintiff and Plaintiff-Intervenors reserve the right to pursue any other remedies for violations of this Consent Decree to which they are entitled. The Plaintiff and Plaintiff-Intervenors will not seek stipulated penalties and civil or administrative penalties for the same violation of the Consent Decree.

## **VII. RIGHT OF ENTRY**

61. Nothing in this Consent Decree shall limit the authority of EPA and Plaintiff-Intervenors to conduct tests and inspections under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable law.

## VIII. FORCE MAJEURE

62. If any event occurs which causes or may cause a delay or impediment to performance in complying with any provision of this Consent Decree, Cargill shall notify the Plaintiff and Plaintiff-Intervenors in writing as soon as practicable, but in any event within twenty (20) business days of when Cargill first knew of the event or should have known of the event by the exercise of due diligence. In this notice Cargill shall specifically reference this Paragraph of this Consent Decree and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by Cargill to prevent or minimize the delay and the schedule by which those measures will be implemented. Cargill shall adopt all reasonable measures to avoid or minimize such delays.

63. Failure by Cargill to provide notice to the Plaintiff and Plaintiff-Intervenors of an event which causes or may cause a delay or impediment to performance shall render this Part VIII voidable by the Plaintiff and Plaintiff-Intervenors as to the specific event for which Cargill has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

64. The Plaintiff or the Plaintiff-Intervenors shall notify Cargill in writing regarding Cargill's claim of a delay or impediment to performance as soon as practicable, but in any event within thirty (30) days of receipt of the Force Majeure notice provided under Paragraph 62. If the Plaintiff or the Plaintiff-Intervenors agree that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Cargill, including any entity controlled by Cargill, and that Cargill could not have prevented the delay by the exercise of due diligence, the parties shall stipulate to an extension of the required deadline(s) for all

requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. Cargill shall not be liable for stipulated penalties for the period of any such delay.

65. If the Plaintiff and the Plaintiff-Intervenors do not accept Cargill's claim that a delay or impediment to performance is caused by a force majeure event, to avoid payment of stipulated penalties, Cargill must submit the matter to this Court for resolution within twenty (20) business days after receiving notice of the Plaintiff's and the Plaintiff-Intervenors position, by filing a petition for determination with this Court. Once Cargill has submitted this matter to this Court, the Plaintiff and Plaintiff-Intervenors shall have twenty (20) business days to file their response to said petition. If Cargill submits the matter to this Court for resolution and the Court determines that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Cargill, including any entity controlled by Cargill, and that Cargill could not have prevented the delay by the exercise of due diligence, Cargill shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

66. Cargill shall bear the burden of proving that any delay of any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond their control, including any entity controlled by it, and that Cargill could not have prevented the delay by the exercise of due diligence. Cargill shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but does not necessarily, result in an extension of a subsequent compliance date or dates.

67. Unanticipated or increased costs or expenses associated with the performance of Cargill's obligations under this Consent Decree shall not constitute circumstances beyond the control of Cargill, or serve as a basis for an extension of time under this Part. However, failure of a permitting authority to issue a necessary permit in a timely fashion is an event of Force Majeure where Cargill has taken all steps available to it to obtain the necessary permit including but not limited to:

- a. submitting a timely and complete permit application;
- b. responding to requests for additional information by the permitting authority in a timely fashion; and
- c. prosecuting appeals of any disputed terms and conditions imposed by the permitting authority in an expeditious fashion.

68. Notwithstanding any other provision of this Consent Decree, this Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of Cargill delivering a notice of Force Majeure or the parties' inability to reach agreement.

69. As part of the resolution of any matter submitted to this Court under this Part VIII, the parties by agreement, or this Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the Plaintiff and the Plaintiff-Intervenors or approved by this Court. Cargill shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

## IX. DISPUTE RESOLUTION

70. The dispute resolution procedure provided by this Part IX shall be available to resolve all disputes arising under this Consent Decree except as otherwise provided in Part VIII regarding Force Majeure.

71. The dispute resolution procedure required herein shall be invoked upon the giving of written notice by one of the parties to this Consent Decree to another advising of a dispute pursuant to this Part IX. The notice shall describe the nature of the dispute, and shall state the noticing party's position with regard to such dispute. The party receiving such a notice shall acknowledge receipt of the notice and the parties shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days from the receipt of such notice.

72. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between representatives of the Plaintiff, the Plaintiff-Intervenors with jurisdiction over the facility at which the dispute arose and Cargill, unless the parties' representatives agree to shorten or extend this period.

73. In the event that the parties are unable to reach agreement during such informal negotiation period, the Plaintiff and the participating Plaintiff-Intervenors shall provide Cargill with a written summary of their position regarding the dispute. In the event the Plaintiff and the participating Plaintiff-Intervenor disagree, the position of the Plaintiff shall control. The position advanced by the Plaintiff and the participating Plaintiff-Intervenors shall be considered binding unless, within forty-five (45) calendar days of Cargill's receipt of the written summary of the

Plaintiff and the participating Plaintiff-Intervenors position, Cargill files with this Court a petition which describes the nature of the dispute, and includes a statement of Cargill's position and any supporting data, analysis, and/or documentation relied on by Cargill. The Plaintiff and the participating Plaintiff-Intervenors shall respond to the petition within forty-five (45) calendar days of filing.

74. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Part IX may be shortened upon motion of one of the parties to the dispute.

75. Notwithstanding any other provision of this Consent Decree, in dispute resolution, this Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of invocation of this Part IX or the parties' inability to reach agreement. The final position of the Plaintiff and the participating Plaintiff-Intervenors shall be upheld by the Court if supported by substantial evidence in the record as identified and agreed to by all the Parties.

76. As part of the resolution of any dispute submitted to dispute resolution, the parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. Cargill shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

## X. GENERAL PROVISIONS

### 77. Effect of Settlement.

a. This Consent Decree is not a permit; compliance with its terms does not guarantee compliance with any applicable federal, state or local laws or regulations.

During the effective period of the Consent Decree, Cargill shall comply with the specific emission reduction requirements, emission limits, operating parameters, monitoring requirements and recordkeeping requirements specified in this Consent Decree including those specified pursuant to Paragraph 19, which shall supercede and control over corresponding terms and conditions of any air quality control permits existing as of the date of entry of this Consent Decree.

b. In determining whether a future modification will result in a significant net emissions increase, Cargill shall not take credit for any emissions reductions required by this Consent Decree, as set forth in Paragraphs 15-27, for netting purposes as defined by the applicable regulations implementing Part C of Title I of the Clean Air Act. In addition, the emission reductions of PM, PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, CO and VOC (at units other than dryers) required under this Consent Decree, as set forth in Paragraphs 15-27, may not be used for any emissions offset, banking, selling or trading program. No further offsets are required for any emission units existing at the facilities in Appendix A as of the date of lodging of this Consent Decree. Cargill may continue to sell and trade: i) NO<sub>x</sub> credits of 50 tons per year for the Memphis facility (an amount equal to the average credits available to Cargill in 2003 and 2004 and representative of Cargill's baseline operations); and ii) emission credits resulting from reductions in excess of those required

to meet the emission limits set forth in Appendices B-L. Cargill may not use VOC emission reductions up to 98 percent of the uncontrolled dryer emissions from sources in Appendices H, I and J for any emissions offset, banking, selling or trading program.

c. Nothing in this Consent Decree shall be construed to limit the ability of the State of Nebraska to ensure compliance with the National Ambient Air Quality Standards (NAAQS) and the PSD increment provisions of 40 C.F.R. Part 52.21(c) and the corresponding state regulations.

78. Resolution of Claims. Satisfaction of the requirements of this Consent Decree constitutes full settlement of and shall resolve all past civil and administrative liability of Cargill and all owners and prior owners and/or operators of the facilities listed in Appendix A to the Plaintiff and the Plaintiff-Intervenors for the violations alleged in the United States' and Plaintiff-Intervenors' Complaints (and any Notices of Violation referenced therein), and all civil and administrative liability of Cargill, and all owners and prior owners and/or operators of the facilities listed in Appendix A, for any violations at the facilities included in Appendix A arising out of facts and events that occurred or may have occurred during the relevant time period, or that arise out of execution of the provisions of this Consent Decree, under the following statutory and regulatory provisions:

a. PSD and Nonattainment New Source Review Requirements at Parts C and D of Subchapter I of the Act and the regulations promulgated thereunder at 40 C.F.R. Part 52.21 and 51.165, and the SIP provisions which incorporate and implement the above listed federal statute and regulations;

b. New Source Performance Standards under Section 111 of the Clean Air Act and the regulations promulgated thereunder at 40 C.F.R. Part 60, including Subparts D, Db, Dc, DD, Kb, GG, VV, and Y, and the SIP provisions which incorporate and implement the above listed federal statute and regulations;

c. Toxic Chemical Release Reporting Requirements pursuant to EPCRA Section 313, 42 U.S.C. § 11023;

d. CERCLA Notification and Reporting Requirements under EPCRA Section 304, 42 U.S.C. § 11004;

e. State Implementation Plan Requirements and State and Local Air Permitting Statutes and Regulations for: (1) permitting of the construction and operation of new and modified stationary sources; (2) requirements relating to emission limits in permits issued for such construction and operation; (3) performance testing and emissions monitoring; (4) data submission and notification requirements; (5) supplementation of permit applications; (6) hazardous air pollutants; (7) emission limits, control requirements, and standards of performance; (8) odor, noise or other nuisance; and (9) payment of fees based on quantity of emissions.

For purposes of this Consent Decree, the "relevant time period" shall mean the period beginning when the United States' claims and/or Plaintiff-Intervenor's claims under the above statutes and regulations accrued through the date of entry of this Consent Decree. During the effective period of the Consent Decree, the emission units subject to this Consent Decree shall be on a compliance schedule and any modification to these units, as defined in 40 C.F.R. Part 52.21, which is not required by this Consent Decree is

beyond the scope of this resolution of claims. Nothing in this Paragraph 78 shall be construed to limit the Plaintiff and Plaintiff-Intervenor's right to demand stipulated penalties in accordance with Paragraph 57. Paragraph 78 shall survive the termination of the Consent Decree.

79. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Cargill of its obligation to comply with all applicable federal, state and local laws and regulations. Nothing in this Consent Decree shall relieve Cargill of its obligation to comply with state and local laws, rules and regulations which become effective after the date of lodging of the consent decree or with State Implementation Plan provisions promulgated after the date of lodging of the Consent Decree. Subject to Paragraphs 60 and 78, nothing contained in this Consent Decree shall be construed to prevent or limit the United States' or the Plaintiff-Intervenor's rights to obtain penalties or injunctive relief under the Act or other federal, state or local statutes or regulations, including but not limited to, Section 303 of the Act, 42 U.S.C. § 7603.

80. Third Parties. Except as otherwise provided by this Consent Decree or by law, this Consent Decree does not limit, enlarge or affect the rights of any party to this Consent Decree as against any third parties. Nothing in this Consent Decree should be construed to create any rights, or grant any cause of action, to any person not a party to this Consent Decree.

81. Costs. Each party to this Consent Decree shall bear its own costs and attorneys' fees through the date of entry of this Consent Decree.

82. Public Documents. All information and documents submitted by Cargill to the Plaintiff and Plaintiff-Intervenors pursuant to this Consent Decree shall be subject to public

inspection, unless subject to legal privileges or protection or identified and supported as business confidential by Cargill in accordance with 40 C.F.R. Part 2.

83. Public Comments - Federal Approval. The parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the requirements of 28 C.F.R. Part 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and consideration of any comments. The United States reserves the right to withdraw or withhold consent if the comments regarding this Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper or inadequate. Cargill and the Plaintiff-Intervenors consent to the entry of this Consent Decree.

84. Notice and Penalty Payment. Unless otherwise provided herein, notifications to or communications with the United States, EPA, the Plaintiff-Intervenors or Cargill shall be deemed submitted on the date they are postmarked and sent either by overnight receipt mail service or by certified or registered mail, return receipt requested. Except as otherwise provided herein, when written notification to or communication with the United States, EPA, the Plaintiff-Intervenors or Cargill is required by the terms of this Consent Decree or when payment of a penalty is required by the terms of this Consent Decree, it shall be addressed or paid as set forth in Appendix Q:

85. Change of Notice Recipient. Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address.

86. Modification. Except as provided herein, there shall be no modification of this Consent Decree without written agreement of the parties. There shall be no material modification of this Consent Decree without the written agreement of the parties and by Order of the Court.

87. Continuing Jurisdiction. The Court retains jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, or modification. During the term of this Consent Decree, any party may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

#### **XI. TERMINATION**

88. Prior to complete termination of the requirements of this Consent Decree, any party may, upon motion to the Court, seek to terminate specific provisions of this Consent Decree. This Consent Decree shall be subject to complete termination upon motion by any party after Cargill satisfies all requirements of this Consent Decree. At such time, if Cargill believes that it is in compliance with the requirements of this Consent Decree, and has paid the civil penalty and any stipulated penalties required by this Consent Decree, then Cargill shall so certify to the Plaintiff and the appropriate Plaintiff-Intervenors, and unless the Plaintiff and the appropriate Plaintiff-Intervenors object in writing with specific reasons within sixty (60) days of receipt of the certification, the Court shall order that this Consent Decree be terminated on Cargill's motion. If the Plaintiff or Plaintiff-Intervenors object to Cargill's certification, then the matter shall be submitted to the Court for resolution under Part IX ("Dispute Resolution") of this Consent Decree. Paragraphs 39 and 78 shall survive the termination of the Consent Decree.

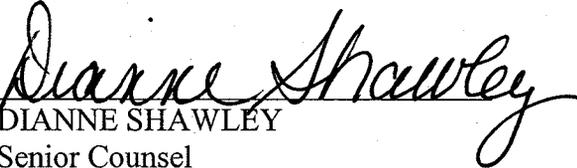
So entered in accordance with the foregoing this \_\_\_\_\_ day of \_\_\_\_\_, 2005.

---

United States District Court Judge  
District of Minnesota

FOR PLAINTIFF, THE UNITED STATES OF AMERICA:

  
KELLY A. JOHNSON  
Acting Assistant Attorney General  
Environment and Natural Resources  
Division  
U.S. Department of Justice

  
DIANNE SHAWLEY  
Senior Counsel  
Environmental Enforcement Section  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611  
(202) 514-0096

THOMAS B. HEFFELFINGER  
United States Attorney  
District of Minnesota  
600 U.S. Courthouse  
300 South Fourth Street  
Minneapolis, MN 55415

By: \_\_\_\_\_  
FRED SIEKERT  
Assistant United States Attorney  
District of Minnesota

United States et al. v. Cargill, Inc.

For Headquarters US EPA

  
THOMAS V. SKINNER            DATE      8/10/05  
Acting Assistant Administrator  
Office of Enforcement and Compliance Assurance  
1200 Pennsylvania Ave, N.W.  
Washington, D.C. 20460

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:



Date 7-27-05

---

Bharat Mathur  
Acting Regional Administrator  
U.S. Environmental Protection  
Agency, Region V  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

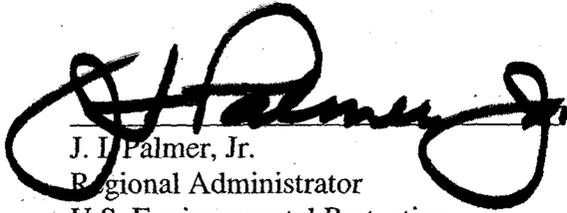
FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:



Date 07-22-05

Richard E. Greene  
Regional Administrator  
U.S. Environmental Protection  
Agency, Region VI  
1445 Ross Avenue, Suite 1200  
Dallas, Texas 75202

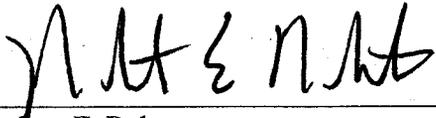
FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:



J. I. Palmer, Jr.  
Regional Administrator  
U.S. Environmental Protection  
Agency, Region IV  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street SW  
Atlanta, Georgia 30303-3104

Date AUG - 1 2005

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

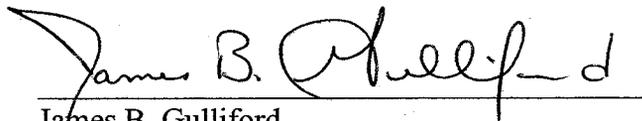


Date: JUL 21 2005

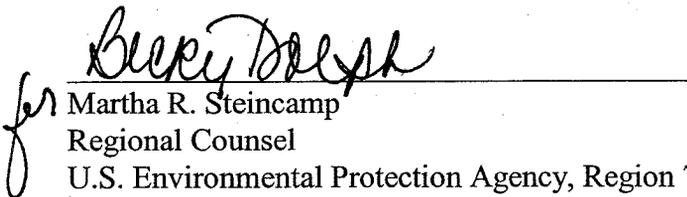
Robert E. Roberts  
Regional Administrator  
US EPA Region 8  
999 18<sup>th</sup> Street Suite 300  
Denver, CO 80202-2466

*United States et al v. Cargill, Incorporated*

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:



James B. Gulliford  
Regional Administrator  
U.S. Environmental Protection Agency, Region 7  
901 N. 5<sup>th</sup> St.  
Kansas City, Kansas 66101



for Martha R. Steincamp  
Regional Counsel  
U.S. Environmental Protection Agency, Region 7  
901 N. 5<sup>th</sup> St.  
Kansas City, Kansas 66101

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF ALABAMA

Ronald W. Gore

Date 8-1-05

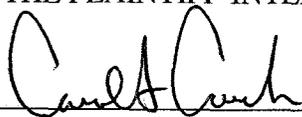
Name

Title

Address

CHIEF, AIR DIVISION  
ALA. DEPT. OF ENV. MGMT.  
MONTGOMERY, AL.

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF GEORGIA



\_\_\_\_\_  
Name  
Title  
Address

Date Aug 1, 2005

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF ILLINOIS

FOR THE STATE OF ILLINOIS  
PEOPLE OF THE STATE OF ILLINOIS *ex rel.*

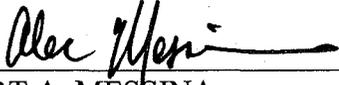
LISA MADIGAN,  
Attorney General of the State of Illinois

MATTHEW J. DUNN, Chief  
Environmental Enforcement/Asbestos Litigation Division

BY:   
THOMAS DAVIS, Chief  
Environmental Bureau  
Assistant Attorney General

DATE: 8/08/05

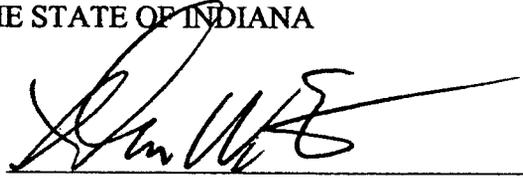
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BY:   
ROBERT A. MESSINA  
Chief Legal Counsel

DATE: 8/16/05

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF INDIANA

Date: JULY 29, 2005

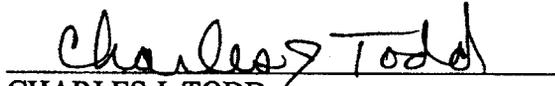


THOMAS W. EASTERLY  
Commissioner  
Indiana Department of Environmental Management

Approved as to form and legality:

STEVE CARTER  
Indiana Attorney General

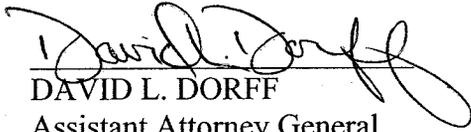
Date: August 5, 2005



CHARLES J. TODD  
Chief Operating Officer  
Office of the Attorney General  
Indiana Government Center South  
5<sup>th</sup> Floor  
302 West Washington Street  
Indianapolis, IN 46204

FOR THE PLAINTIFF-INTERVENOR,  
STATE OF IOWA

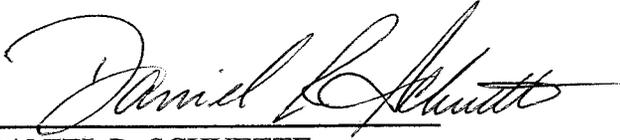
THOMAS J. MILLER  
Attorney General of Iowa

  
DAVID L. DORFF

Assistant Attorney General  
Environmental Law Division  
Lucas State Office Bldg.  
321 E. 12<sup>th</sup> St., Room 018  
Des Moines, IA 50319  
Phone: (515) 281-5351  
Fax: (515) 242-6072  
E-mail: ddorff@ag.state.ia.us

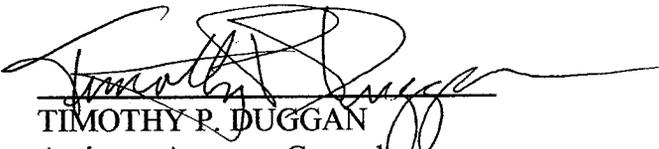
Date 7/27/05

FOR PLAINTIFF-INTERVERNOR, THE STATE OF MISSOURI



Date: 8/1/05

DANIEL R. SCHUETTE  
Interim Division Director  
Air and Land Protection Division  
Missouri Department of Natural Resources  
Jefferson State Office Building, 12<sup>th</sup> Floor  
205 Jefferson Street  
P.O. Box 176  
Jefferson City, Missouri 65102-0176

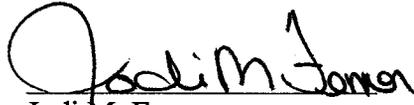


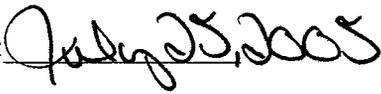
Date: 7/29/05

TIMOTHY P. DUGGAN  
Assistant Attorney General  
Environmental Protection Division  
Broadway State Office Building, 8<sup>th</sup> Floor  
221 W. High Street  
P.O. Box 899  
Jefferson City, MO 65102-0899

FOR PLAINTIFF-INTERVENOR, THE STATE OF NEBRASKA:

By: JON C. BRUNING  
Attorney General

By:   
Jodi M. Fenner  
Assistant Attorney General  
2115 State Capitol Building  
Lincoln, NE 68509-8920  
(402) 471-2682

Date: 

Signature page: USA et al v. Cargill, Incorporated, U.S. District Court, District of  
Minnesota

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF NORTH CAROLINA



B. Keith Overcash, P.E.  
Director, Division of Air Quality  
1641 Mail Service Center  
Raleigh, North Carolina 27699-1641

Date 8/2/05

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF OHIO

JIM PETRO  
ATTORNEY GENERAL OF OHIO



MARGARET A. MALONE  
Assistant Attorney General  
Environmental Enforcement Section  
30 East Broad Street, 25<sup>th</sup> Floor  
Columbus, Ohio 42315-3400

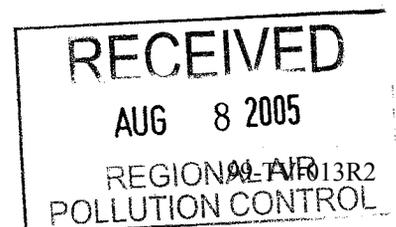
Date: 8/8/05

FOR THE COMBINED HEALTH DISTRICT OF MONTGOMERY COUNTY, OHIO  
REGIONAL AIR POLLUTION CONTROL AGENCY



JOHN A. PAUL, RAPCA Supervisor  
Duly Authorized Agent for the Health Commissioner  
RAPCA  
117 South Main Street  
Dayton, Ohio 45422

Date: 8/8/05



FOR THE PLAINTIFF-INTERVENOR, THE TENNESSEE COUNTY OF SHELBY AND  
CITY OF MEMPHIS



YVONNE S. MADLOCK

Director

Memphis and Shelby County Health Department

814 Jefferson Avenue

Memphis, Tennessee 38105

Date 8/6/05

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF NORTH DAKOTA



Date

7-25-05

---

Terry L. Dwelle, MD, MPHTM  
State Health Officer  
State of North Dakota  
600 E. Boulevard Avenue  
2<sup>nd</sup> Floor-Judicial Wing  
Bismarck, ND 58505-0200  
Telephone 701.328.2372  
Facsimile 701.328.4727

**United States, et al. v. Cargill Incorporated**

For the County of Linn, Iowa:

**JEFFREY L. CLARK**  
Assistant Linn County Attorney



7/22/05  
Date

Jeffrey L. Clark  
Attorney in Charge  
Assistant Linn County Attorney  
Linn County Courthouse  
51 3<sup>rd</sup> Ave. Bridge  
Cedar Rapids, Iowa 52401  
Telephone: (319) 892-6340  
Facsimile: (319) 892-6389  
Email: [jeff.clark@linncounty.org](mailto:jeff.clark@linncounty.org)

FOR THE IOWA COUNTY OF POLK

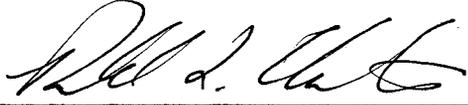
Date: 7/25/05



---

Michael B. O'Meara PK0013710  
Assistant Polk County Attorney  
111 Court Ave., Rm. 340  
Des Moines, Iowa 50309  
Telephone: (515) 286-3341  
Fax: (515) 286-3314  
Email: momeara@attorney.co.polk.ia.us

FOR DEFENDANT, CARGILL, INCORPORATED



Date Aug 02, 2005

Ronald L. Christenson  
Corporate Vice President, Chief Technology Officer  
Cargill, Incorporated  
15615 McGinty Road West  
Wayzata, Minnesota 55391-2398

## **List of Appendices**

Appendix A—List of Cargill Oilseed and Corn Processing Facilities Subject to The Consent Decree

Appendix B—Boiler SO<sub>2</sub> Emission Control Plan

Appendix C—Boiler CO Emission Control Plan

Appendix D—Boiler NO<sub>x</sub> Emission Control Plan

Appendix E—Extraction VOC Emission Control Plan—Soybean Processing Plants

Appendix F—Extraction VOC Emission Control Plan—Corn Germ and Sunflower Processing Plants

Appendix G –Extraction VOC Emission Control Plan – Specialty Plants

Appendix H – Corn Processing VOC Emission Control Plan

Appendix I – Integrated Feed/Bran Drying System VOC Emission Control Plan

Appendix J – Dayton Corn Processing

Appendix K – Corn Processing CO Emission Control Plan

Appendix L – Hammond Process Source SO<sub>2</sub> Emission Control Plan

Appendix M - Performance Testing Plan

Appendix N - Extraction Solvent Loss Recordkeeping Template

Appendix O – Carbon Furnace Test Protocol

Appendix P – Supplemental Environmental Projects

Appendix Q – Notice and Penalty Payment

**Appendix A**

**List of Cargill Corn and Oilseed Processing Facilities Subject to the Consent Decree**

**Appendix A- List of Cargill Corn and  
Oilseed Processing Facilities Subject to the Consent Decree**

**I. Corn Processing Facilities**

<b>Facility</b>	<b>Address</b>
Blair, Nebraska (note 1)	650 Industrial Road Blair, NE 68008
Cedar Rapids, Iowa	1710 16 <sup>th</sup> Street S.E. Cedar Rapids, IA 52401
Dayton, Ohio	3201 Needmore Road Dayton, OH 45414-4321
Decatur, Alabama	1030 State Docks Road Decatur, AL 35601-7538
Dimmitt, Texas (note 2)	700 East Jones Street Dimmitt, TX 79027
Eddyville, Iowa	1 Cargill Drive Eddyville, IA 52553-5000
Hammond, Indiana	1100 Indianapolis Blvd. Hammond, IN 46320
Memphis, Tennessee	2330 Buoy Street Memphis, TN 38113-1502
Wahpeton, North Dakota	18049 County Road 8E Wahpeton, ND 58075

(1) The Blair, NE facility includes all sources and operations that have been permitted as part of the wet corn mill facility (including the ethanol facility). Facilities at Blair, NE that are now, or were in the past, joint ventures with Cargill are not subject to the Consent Decree.

(2) Cargill shall notify the Plaintiff and Appropriate Plaintiff-Intervenor of the re-start of the Dimmitt, TX facility in the first semi-annual report filed pursuant to Paragraph 36 after the re-start of the facility.

**II. Oilseed Processing Facilities**

<b>Facility</b>	<b>Address</b>
Cedar Rapids East, Iowa	411 6 <sup>th</sup> Street Northeast East Cedar Rapids, IA 52402
Des Moines, Iowa	3030 East Granger Avenue Des Moines, IA 50306
Fayetteville, North Carolina	1754 River Road Fayetteville, NC 28301
Gainesville, Georgia	862 West Ridge Road Gainesville, GA 30501

Guntersville, Alabama	2930 Guntersville Park Drive Guntersville, AL 35976
Iowa Falls, Iowa	602 Industrial Road Iowa Falls, IA 50126
Kansas City, Missouri	2334 Rochester Avenue Kansas City, MO 64120
Raleigh, North Carolina	1400 South Blount Street Raleigh, NC 27603-2506
Sidney, Ohio	2400 Industrial Drive Sidney, OH 45365
Sioux City, Iowa	11 <sup>th</sup> & Clark Streets Sioux City, IA 51101
Wichita, Kansas	1425 North Mosley Wichita, KS 67314
West Fargo, North Dakota	250 7 <sup>th</sup> Avenue NE West Fargo, ND 58078
Cedar Rapids West, Iowa	1110 12th Avenue SW Cedar Rapids IA 52404
Lafayette, Indiana	1503 Wabash Avenue Lafayette, IN 47905
Bloomington, Illinois	115 South Euclid Bloomington, IL 61702

**Appendix B**

**Boiler SO<sub>2</sub> Emission Control Plan**

## Appendix B - Cargill Boiler SO2 Emission Control Plan

Facility	Emission Unit Description and Number	Heat Input MMBTU	Monitoring
Cedar Rapids	PC Boiler - 72-CB (2)	240.5	CEMS - 12 month rolling sum
Dayton	PC Boiler - B004	567	CEMS - 12 month rolling sum
Decatur	Stoker Boiler - S407 (2)	179.74	CEMS - 12 month rolling sum
Eddyville	Stoker Boiler - 1.001	282.1	CEMS - 12 month rolling sum
Eddyville	Stoker Boiler - 1.002	282.1	CEMS - 12 month rolling sum
Eddyville	Stoker Boiler - 1.003	282.1	CEMS - 12 month rolling sum
Fayetteville	Stoker Boiler - ES22	129	CEMS - 12 month rolling sum
Gainesville	Stoker Boiler - B001	145	CEMS - 12 month rolling sum
Hammond (1)	Blr No.6-Gas Tube & Tile - 1003U	200	N/A
Hammond (1)	Blr No.7-Gas Tube & Tile - 1004U	120	Retire
Hammond (1)	Blr No.8-Gas Tube & Tile - 1005U	120	N/A
Hammond (1)	Blr No.10-Gas Tube & Tile - 1006U	120	N/A
Memphis	Stoker Boiler - 8001	247	CEMS - 12 month rolling sum
Memphis	PC Boiler - 8301 (2)	247	CEMS - 12 month rolling sum
Sidney	Stoker Boiler - B001	54.34 (derated to 35.02)	CEMS - 12 month rolling sum
Sidney	Stoker Boiler - B002	54.34 (derated to 26.4)	CEMS - 12 month rolling sum

**Comments:**

CEMS monitoring shall be in accordance with 40 C.F.R. Part 60 and compliance with 40 C.F.R. Part 60 shall be deemed compliance with this Consent Decree.

Coal analysis will be conducted using at least one composite sample a month.

**Notes:**

- (1) The Hammond boilers No. 6 fuel oil capability is being eliminated as part of the Boiler SO2 Emission Control Plan
- (2) Cargill shall demonstrate that the individual facility permit limits comply with the combined SO2 capacity weighted average of 1.2 lb/MMBtu for the Cedar Rapids (PC Boiler - 72-CB), Memphis (PC Boiler - 8301) and Decatur (Stoker Boiler - S407) coal boilers pursuant to paragraph 16 of this Consent Decree using the following compliance demonstration formula:

$$X * (240.5/667.5) + Y * (180/667.5) + Z * (247/667.5) < \text{or} = 1.2 \text{ lb/MMBtu}$$

CR heat input capacity = 240.5 lb/ MMBtu  
 DE heat input capacity = 180 lb/ MMBtu  
 ME PC heat input capacity = 247 lb/ MMBtu  
 Total CR, DE, ME PC heat input capacity = 667.5 lb/ MMBtu  
 X = CR SO2 lb/MMBtu emission rate under new SO2 limit  
 Y = DE SO2 lb/MMBtu emission rate under new SO2 limit  
 Z = ME PC SO2 lb/MMBtu emission rate under new SO2 limit

**Appendix C**

**Boiler CO Emission Control Plan**

## Appendix C—Boiler CO Emission Control Plan

Cargill proposes installation of a staged combustion over fire air system as a CO emissions reduction and combustion optimization project for the Eddyville coal boilers (EU 1.001, 1.002 and 1.039). The project involves adding to the existing overfire air turbulence system including: (1) replacement of the existing overfire air fan with a new higher capacity fan; (2) addition of overfire air nozzles to each of the front and rear boiler walls; and (3) replacement of the headers and nozzles with a higher capacity design. The project also involves engineering and installation of equipment to modify the existing undergrate flue gas recirculation system to promote even distribution of the flue gas across the width of the existing undergrate air ductwork. Cargill also will engineer and install equipment for injecting flue gas above the grate surface. In addition, Cargill will undertake and complete additional boiler efficiency work that may include superheater and economizer repairs or replacement. The project is estimated to cost approximately \$8 million. The boilers are currently subject to BACT limits of 1100 lbs of CO per hour per boiler or 3.899 lbs CO/MMBtu heat input. Annual allowable CO emissions are presently 14,454 tons per year. Detroit Stoker Company has provided a guarantee that 12-month rolling average CO emissions from these units will be capable of meeting the proposed limit of 4,374 tons per year based on a 12-month rolling sum based on a flue gas outlet of O<sub>2</sub> of 4% wet basis burning powder river basin coal. CO emissions from these units will be measured by a continuous emissions monitor.

**Appendix D**

**Boiler NO<sub>x</sub> Emission Control Plan**

Appendix D - Cargill Boiler NOx Emission Control Plan

Facility	Emission Unit Description and Number	Heat Input MM/BTU	Control Plan	Emission Limitations	Monitoring	Schedule (Years) from entry of Consent Decree
Blair	Package Boiler - 20A	198	LNB, FGR	0.07 lb/mmbtu - 30 day rolling average	CEMS	10
Blair	Package Boiler - 20B	198	LNB, FGR	0.07 lb/mmbtu - 30 day rolling average	CEMS	10
Blair	Package Boiler - 20C	198	LNB, FGR	0.07 lb/mmbtu - 30 day rolling average	CEMS	10
Blair	Package Boiler - 21	276.67	LNB, FGR	0.05 lb/mmbtu - 30 day rolling average	CEMS	10
Cedar Rapids	PC Boiler - 72-CB	240.5	LNB/OFA	369 ton per 12-month rolling sum	CEMS	10
Cedar Rapids	Package Boiler - 101	275	LNB, FGR	0.06 lb/mmbtu - 30 day rolling average	CEMS	10
Dayton	PC Boiler - B004	567	LNB, OFA, COMPLY w/NOX SIP PLAN	0.45 lb/mmbtu - 30 day rolling average; 745 ton per 12-month rolling sum	CEMS	10
Dayton	Package Boiler - B005	169.6	RETIRE	Retire	N/A	5
Dayton	Package Boiler - B006	318.5	LNB, FGR, REMOVE CURRENT FUEL LIMIT	0.06 lb/mmbtu (NOTE 1) - 30 day rolling average	CEMS	(NOTE 1)
Decatur	Stoker Boiler - S407	179.74	GOOD COMBUSTION	0.57 lb/mmbtu - 30 day rolling average	CEMS	5
Decatur	Package Boiler - S411	97.6	BACK UP OPERATION	1800 hrs/12 month rolling period	Recordkeeping	10
Decatur	Package Boiler - S412	122.1	BACK UP OPERATION	1800 hrs/12 month rolling period	Recordkeeping	10
Dimmitt	Package Boiler - S406	98.5	LNB	0.08 lb/mmbtu	Recordkeeping	10
Dimmitt	Package Boiler - S407	135.6	LNB	0.14 lb/mmbtu	Ref. Method Testing	10
Eddyville	Stoker Boiler - 1.001	282.1	FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	Ref. Method Testing	10
Eddyville	Stoker Boiler - 1.002	282.1	FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	CEMS	10
Eddyville	Stoker Boiler - 1.039	282.1	FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	CEMS	10
Eddyville	Package Boiler - 51	230	FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	CEMS	10
Eddyville	Package Boiler - 84	182.1	FGR, COMBINED LIMIT	0.06 lb/mmbtu	CEMS	10
Eddyville	Package Boiler - 86	182.1	FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	CEMS	10
Fayetteville	Stoker Boiler - ES22	129	GOOD COMBUSTION	0.7 lb/mmbtu	CEMS	10
Gainesville	Stoker Boiler - B001	145	GOOD COMBUSTION	0.41 lb/mmbtu	Ref. Method Testing	10
Hammond	Package Boiler - 1001U	96	RETIRE	Retire	Ref. Method Testing	10
Hammond	Package Boiler - 1002U	160	LNB, FGR, COMBINED LIMIT	0.06 lb/mmbtu	N/A	10
Hammond	Gas Tube & Tile - 1003U	200	COMBINED LIMIT	0.28 lb/mmbtu	Ref. Method Testing/Recordkeeping	10
Hammond	Gas Tube & Tile - 1004U	120	RETIRE	Retire	Ref. Method Testing/Recordkeeping	10
Hammond	Gas Tube & Tile - 1005U	120	BACK UP OPERATION, COMBINED LIMIT	1800 hrs/12 month rolling period	N/A	10
Hammond	Gas Tube & Tile - 1006U	120	BACK UP OPERATION, COMBINED LIMIT	1800 hrs/12 month rolling period	Recordkeeping	10
Memphis	Stoker Boiler - 8001	247	TBD	Combined (8001, 8301, & 8500) limit of 786 tons per 12 month rolling sum (NOTE 3)	Recordkeeping	10
Memphis	PC Boiler - 8301	247	TBD		CEMS	3 (NOTE 4)
Memphis	Package Boiler - 8500	312	TBD		CEMS	3 (NOTE 4)
Sioux City	Package Boiler - 23	184.3	LNB, FGR	0.06 lb/mmbtu - 30 day rolling sum	CEMS	3 (NOTE 4)
Sioux City	Package Boiler - 17	97	BACK UP OPERATION	Only operational when Boiler - 23 is not operating	CEMS	10

Comments:

To permit the installation of boiler NOx control, Cargill may bring on site and use temporary boilers, provided boilers are gas fired and fired for no longer than 30 days per an installation.

CEMS monitoring shall be in accordance with 40 CFR Part 60 and compliance with 40 CFR Part 60 shall be deemed compliance with this Consent Decree.

Notes:

- (1) To implement the retiring of B005 and the acceptance of 0.06 lb/mmbtu on B006, the natural gas fuel usage limits on B006 will be removed from Ohio Permit to Install No. 08-4215. Cargill will comply with the 0.06 lb/mmbtu emission limitation when using natural gas or fuel oil. Within twenty-four months of the date of logging of this consent decree, Cargill will submit an Ohio permit to install application to RAPPACA for the retirement of B005 and the removal of the natural gas usage restrictions for B006.
- (2) Total NOx from Stoker Boilers 1.001, 1.002, 1.039 and package boilers 84 and 86 is limited to 212.1 lb/hr, 30 day rolling average.
- (3) To implement the NOx cap, coal volume limits and ash limits on 8001 and 8301 are removed.
- (4) All controls required to meet the total NOx allowable shall be installed by the end of the third year from entry of the Consent Decree. Compliance with the 12-month rolling sum shall be demonstrated beginning 12 months after the third year from entry of the Consent Decree.

**Appendix E**

**Extraction VOC Emission Control Plan—Soybean Processing Plants**

**Appendix E—Extraction VOC Emission Control Plan—Soybean Processing Plants**

<b>Facility</b>	<b>Design Capacity TPY</b>
Cedar Rapids East, Iowa	1,007,400
Des Moines, Iowa	766,500
Fayetteville, North Carolina	1,095,372
Gainesville, Georgia	990,000
Guntersville, Alabama	1,042,440
Iowa Falls, Iowa	1,040,250
Kansas City, Missouri	993,000
Raleigh, North Carolina	930,750
Sidney, Ohio	945,000
Sioux City, Iowa	1,642,500
Wichita, Kansas	777,000

**Total Solvent Loss Capacity Weighted Average:**

Cargill shall demonstrate compliance with the Total Solvent Loss Capacity Weighted Average using the following compliance demonstration formula:

$$\text{Conventional Soybean} = \frac{\sum(\text{Seed}_i * \text{SLR}_i)}{\sum(\text{Seed}_i)} \leq 0.175 \text{ gal/ton}$$

Where:       Seed<sub>i</sub> = Design capacity of oilseed plant i; and  
                   SLR<sub>i</sub> = Final SLR Limit for oilseed plant i.

**Appendix F**

**Extraction VOC Emission Control Plan—Corn Germ and Sunflower Processing Plants**

**Appendix F—Extraction VOC Emission Control Plan—Corn Germ and Sunflower Processing Plants**

<b>Facility</b>	<b>Design Capacity TPY</b>
West Fargo, North Dakota	735,840
Eddyville, Iowa	547,500
Memphis, Tennessee	547,500
Blair, Nebraska	438,000

**Total Solvent Loss Capacity Weighted Average:**

Cargill shall demonstrate compliance with the Total Solvent Loss Capacity Weighted Average using the following compliance demonstration formula:

$$\text{Corn Germ / Sunflower} = \frac{\sum(\text{Seed}_i * \text{SLR}_i)}{\sum(\text{Seed}_i)} \leq 0.30 \text{ gal/ton}$$

Where:       Seed<sub>i</sub> = Design capacity of oilseed plant i; and  
                   SLR<sub>i</sub> = Final SLR Limit for oilseed plant i.

**Appendix G**

**Extraction VOC Emission Control Plan – Specialty Plants**

## Appendix G

### Extraction VOC Emission Control Plan – Specialty Plants

Location	Specialty Solvent Loss Factor	Conventional Solvent Loss Factor
Lafayette, Indiana	1.0 gal/ton	0.175 gal/ton
Cedar Rapids West, Iowa	0.9 gal/ton	0.175 gal/ton
Bloomington, Illinois	0.9 gal/ton	0.175 gal/ton

#### Compliance Demonstration Calculation

$$\text{Compliance Ratio} = \frac{\text{Actual Solvent Loss}}{\sum_{i=1}^n ((\text{Oilseed})_i * (\text{SLF})_i)}$$

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

Oilseed = Tons of each oilseed type “i” (Specialty and Conventional) processed during the previous 12 operating months

SLF = The corresponding solvent loss ratio limit (gal/ton) for oilseed “i” listed in Table

Compliance is to be determined on a location specific basis.

If the compliance ratio is less than or equal to 1, the source was in compliance.

**Appendix H**

**Corn Processing VOC Emission Control Plan**

5

Appendix H - Corn Processing VOC Emission Control Plan

Facility	Emission Unit Description and Number	Control Device Description	Emission Limit	Parameters Monitored	Compliance Operating Range	Parameter Monitoring Frequency	Schedule/years from Issuance of Consent Decree
Blair	Carbon Furnace - Fructose - (E6)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Blair	Gluten Flash Drying - (E)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Blair	Steephouse Scrubber (S)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3
Cedar Rapids	Carbon Furnace - Corn Syrup - (EU02)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Cedar Rapids	Feed Drying - Rotary - (EU-72-FD)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Feed Drying - STD - (EU-72-FD)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Germ Drying - Fluid Bed - (EU-113)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Germ Drying - Fluid Bed - (EU-20)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Gluten Drying - STD - (EU-20)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Gluten Drying - STD - (EU-20)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Steephouse Scrubber (EU-41)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3
Dayton	Carbon Furnace - Corn Syrup - (P067)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Dayton	Carbon Furnace - Fructose - (P682)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Dayton	Gluten Drying - Flash - (P057)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P031)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P052)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P088)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Gluten Drying - Flash - (P072)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Carbon Furnace	Zero hearth furnace or thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Carbon Furnace	Zero hearth furnace or thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Feed Drying - Rotary	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dimmitt	Carbon Furnace - (S-304)	Zero hearth furnace or thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Eddyville	Carbon Furnace - (97.000)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Eddyville	Carbon Furnace - (58.000)	Zero hearth furnace	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Eddyville	Millhouse Scrubber (9.000)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3
Eddyville	Millhouse Scrubber (102.000)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3
Eddyville	Millhouse Scrubber (119.000)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3

Appendix H - Corn Processing VOC Emission Control Plan

Facility	Emission Unit Description and Number	Control Device Description	Emission Limit	Parameters Monitored	Compliance Operating Range	Parameter Monitoring Frequency	Schedule Years from Logging of Consent Decree
Hammond	Carbon Furnace - (104-01-R)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3 (2)
Hammond	Feed Drying - Rotary - (124-01-G)	Thermal oxidizer	TBD (Note 4)	Operating Temperature	TBD (3 hour average)	Continuously	5 (2)
Hammond	Germ Drying - Rotary - (21A-02-G)	Thermal oxidizer	TBD (Note 4)	Operating Temperature	TBD (3 hour average)	Continuously	5 (2)
Hammond	Germ Drying - Rotary - (51A-02-G)	Thermal oxidizer	TBD (Note 4)	Operating Temperature	TBD (3 hour average)	Continuously	5 (2)
Memphis	Carbon Furnace - Corn Syrup - (6008)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Carbon Furnace - Fructose - (9002)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Carbon Furnace - Fructose - (9008)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Gluten Drying - Flash - (4008B)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Gluten Drying - Flash - (4011)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Germ Drying - STD - (4011)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Germ Drying - STD - (4011)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Wahpeton	Carbon Furnace - Fructose - (REF41)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3

Comments:

In addition, for unit(s) controlled by RTOs not designed for on-line regeneration (i.e., bake-out) and that are not preceded by a WESP or equivalent device(s), the emission limitations do not apply to periods of off-line RTO regeneration not to exceed 50 unit operating hours per calendar year and individual off-line RTO regeneration periods not to exceed 12 unit operating hours. For RTOs servicing more than one unit, a unit operating hour is any hour in which one or more of the unit is on line. Off-line RTO regeneration while all associated units are shut down is not included in these operating limitations. Also, off-line RTO regeneration periods that can be completed during unrelated shutdown, or malfunction periods (i.e., periods not related to the need to perform an off-line RTO regeneration) are not included in these limitations (i.e., Cargill may perform preventative off-line RTO regenerations during periods when the RTO is off-line for other reasons such as when the RTO is off-line due to maintenance or malfunction of upstream PM control equipment which requires bypass of the RTO). Cargill may petition EPA and the appropriate state or local regulatory agency to adjust these operating limitations for a specific RTO. With respect to the Dayton, OH facility, all on-line regeneration (or bake-out) shall be conducted in accordance with CAC Rules 3745-15-06(A)(3) and 3745-15-06(B).

All To Be Determined (TBD) values will be established through stack testing pursuant to Appendices M and O.

Notes:

- To the extent that the VOC performance test for this source demonstrates emissions above the 20 ppm and 95 percent VOC destruction efficiency emission limit noted above, within 90 days from the date of the performance test, Cargill shall submit a Supplemental VOC Emission Control Plan to the Plaintiff and the Appropriate Plaintiff-Intervenor that will establish a schedule to be completed within five years of lodging of this Consent Decree to demonstrate VOC emission reductions at the facility that are equivalent to or greater than the ton per year reduction necessary for the tested source to meet the lesser of either the 95 percent destruction or 20 ppm standard. Such reductions may be derived from either: (1) sources existing at the facilities as of the date of lodging of this Consent Decree and not subject to additional VOC control under this Appendix to the Consent Decree based on 2003 baseline VOC emissions (as adjusted, if necessary, to reflect changes to test methodology); or (2) for sources at the facility that are subject to VOC control under this Appendix to the Consent Decree, VOC emissions reductions in excess of the emission limits established for such sources. Such supplemental emission reductions will become an enforceable part of this Consent Decree upon approval by the Plaintiff and Appropriate Plaintiff-Intervenor.
- Within five years from the date of lodging of this Consent Decree, Cargill shall submit the emission limits established pursuant to Paragraph 23 and this Appendix as an amendment to the Hammond, Indiana facility's RACT plan; IDEM shall incorporate the emission limits into the RACT plan.
- Cargill shall demonstrate compliance with 98% control by complying with the Dayton, Ohio Corn Processing Ozone Cap in Appendix J.
- The overall control efficiency requirement for this unit shall be established through performance testing approved by IDEM and conducted in accordance with Appendix M. IDEM will establish the overall control efficiency requirement based on the level of efficiency demonstrated during this testing. The final control efficiency requirement will be established pursuant to Paragraph 34.

**Appendix I**

**Integrated Feed/Bran Drying System VOC Emission Control Plan**

Appendix I - Integrated Feed/Bran Drying Systems VOC Emission Control Plan

Facility	Emission Unit Description and Number	Control Device Description	Parameters Monitored	Parameter Monitoring Frequency	Emission Unit Description and Number	Control Device Description	Parameters Monitored (5)	Parameter Monitoring Frequency	Emission Limit
Dayton	Feed Dryer - STD - (P032)	Thermal Oxidizer	Temp = 1500 F (2)	Continuously	Bran Dryer - Rotary - (P040) Bran Dryer - Rotary - (P058) Bran Dryer - Rotary - (P037)	Scrubbers	Pressure Drop > 6 inwc (3) (8) pH > 8 (3) (8) Scrubbant Flow Rate > 850 gpm/600 gpm (2,4)	Continuously Continuously	TBD (6)
	Feed Dryer - STD - (P034)								
Memphis	Feed Dryer - STD - (4003)	Thermal Oxidizer	Temp = 1500 F (2)	Continuously	Bran Dryer - Rotary - (4003) Bran Dryer - Rotary - (4003)	Scrubbers	Pressure Drop > 6 inwc (3) pH > 8 (3) Scrubbant Flow Rate > 2000 gpm (2,3)	Once Each Day Once Each Day Continuously	TBD (1)
	Feed Dryer - STD - (4003)								
Hammond	Feed Dryer - Rotary - (89-03-G)	Thermal Oxidizer	Temp = TBD (2, 7)	Continuously	Bran Dryer - Flash - (89-01-G)	Scrubber	Pressure Drop > 6 inwc pH > 8 Scrubbant Flow Rate > 400 gpm (2)	Once Each Day Once Each Day Continuously	TBD (1)
	Feed Dryer - Rotary - (89-03-G)								
Warbaton	Feed Dryer - Rotary Bran Pre-dryer Germ Dryer	Thermal Oxidizer	Temp = 1350 F (2)	Continuously	Gluten Flash Dryer	Scrubber	Pressure Drop > 4 inwc pH > 3 Scrubbant Flow Rate > 100 gpm (2)	Once Each Day Once Each Day Continuously	TBD (1)

Comments:

Thermal oxidizers at Dayton and Memphis facilities will be designed to meet a residence time of at least one second and a combustion temperature of 1500 °F.

Prior to initial performance testing (as per Appendix M) final optimized scrubber parameters for pH +/- 20 percent of listed parameters and scrubbant flow rate +/- 20 percent of listed parameters will be evaluated and established based on assessment of VOC outlet concentrations using EPA reference test Method 25A for continuous feedback and analysis. The optimized parameters, to the extent they are different from listed parameters, must be met as of the date of initial performance testing and, as of the date of initial performance testing, replace listed parameters and become an enforceable part of this Consent Decree.

Notes:

- Within three years from lodging of this Consent Decree, Cargill shall undertake performance testing of the scrubber outlet of the integrated feed/bran drying system as per Appendix M to establish an emission limit for this system.
- 3 hour average.
- Operating parameters specified are for each scrubber.
- 850 gpm applies to scrubber for P037 & P040 - 600 gpm applies to scrubber for P058.
- Within five years from the date of lodging of this Consent Decree, Cargill shall submit the emission limits established pursuant to Paragraph 24 and this Appendix as an amendment to the Hammond, Indiana facility's RACT plan; IDEM shall incorporate the emission limits into the RACT plan.
- Within three years from lodging of this Consent Decree, Cargill shall conduct performance testing of the two existing scrubber outlet stacks of the integrated feed/bran drying system as per Appendix M to establish the allowable short-term VOC emission limit for this system. The allowable short-term VOC emission limit will be determined based upon the arithmetic average of the test runs. The measured VOC emission results shall be converted to pounds per hour and multiplied by a factor of 2.2, plus the standard deviation times 2.92 divided by the square root of the number of test runs. The number of test runs shall be not less than three. Emission measurements shall be performed according to U.S. EPA Reference Test Method 25A. In the event U.S. EPA promulgates a new VOC test method and RACT requests Cargill to use such method for purposes of demonstrating compliance with any allowable short-term VOC limits, Cargill shall, within 12 months of such request, conduct emissions testing and establish revised allowable VOC limits, which shall be based on data from the new test method plus the standard deviation times 2.92 divided by the square root of the number of test runs.
- Feed Dryer (89-03-G) shall demonstrate compliance with a control efficiency requirement of 85% control or <= 10 ppm. The temperature limit for the thermal oxidizer shall equal the temperature at which the feed dryer demonstrates 95% control or <= 10 ppm.
- Cargill shall record the pressure drop once per a day, Cargill shall record pH as an average for each 8-hour shift while the emissions unit is in operation.

**Appendix J**

**Dayton Corn Processing**

## Appendix J – Dayton, Ohio Corn Processing Ozone Cap

Emission Unit Number and Description	Pollutant Included in Ozone Cap	Monitoring
PC Boiler (B004)	NOx	CEM(1)
Package Boiler (B006)	NOx	CEM(1)
Package Boiler (B005)	NOx	Retire
Gluten Drying-Flash (P057)	VOC	Performance Testing (2)(3)
Germ Drying-STD (P031)	VOC	Performance Testing (2)(3)
Germ Drying-STD (P052)	VOC	Performance Testing (2)(3)
Germ Drying-STD (P088)	VOC	Performance Testing (2)(3)
Carbon Furnace -Corn Syrup (P067)	VOC	Performance Testing (2)(3)
Carbon Furnace-Fructose (P582)	VOC	Performance Testing (2)(3)
Gluten Drying-Flash (P072)	VOC	Performance Testing (2)(3)
Feed Dryers-STD (P032, P033 & P034)		
Bran Dryers-Rotary (P040, P058 & P037)	VOC	Performance Testing (2)(3)

**Comments:**

The 12-month rolling sum total of 854 tons of NOx and VOC emissions from the sources and for the pollutants noted in column 2 above will be used to demonstrate compliance with the ozone cap of 854 tons of VOC and NOx per 12-month period as per paragraphs 25 and 30 of the Consent Decree. Compliance with the 12-month rolling sum ozone cap of 854 tons for the process source VOC and boiler NOx emission sources listed in Appendix J above shall be demonstrated during the first 11 months following the fifth year from lodging of the Consent Decree based on the following schedule of limits in tons per year:

Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11
142	284	356	427	498	567	641	711	749	785	822

In addition to the emissions testing and other requirements of this Appendix J, Cargill shall also comply with the emissions testing requirements set forth in Appendix M, including testing of emission units P032, P033, P034, P040, P058 and P037.

**Notes:**

- (1) Within five years from lodging of the Consent Decree, NOx emissions will be measured by CEMs and recorded by a data acquisition system. Emissions concentrations recorded by the CEMs will be converted to mass emissions using the air volume as determined by the continuous flow monitor.

## Appendix J – Dayton, Ohio Corn Processing Ozone Cap

(2) Within five years from lodging of the Consent Decree, annual VOC performance testing (once per 12-month period) will occur for the VOC sources identified above (P032, P033, P034, P040, P058, P037, P057, P031, P052, P088, P067, P582, & P072). All VOC performance testing will be conducted using U.S. EPA Reference Test Method 25A. All measured VOC results will be converted to a pound per hour basis, and multiplied by 2.2 in accordance with OAC Rule 3745-21-10(C)(7).

An emission factor for each VOC source based on pound per hour VOC emission rates as determined during the most recent testing will be divided by a corresponding process rate (bushels of ground corn for dryer sources and tons of carbon regenerated for carbon furnaces). The emission factor will be used to calculate the monthly sum of VOC emissions that will be combined with the monthly sum of NOx emissions from the NOx sources listed in this Appendix to determine compliance with the ozone cap. If a VOC emission unit identified above is modified within the definition of "modification" under OAC 3745-31-01(PPP), then Cargill will retest the VOC emission rate for such emission unit within 90 days from the modification. Cargill shall track compliance with the ozone cap through completion each month of the Ozone Cap Data Recording and Compliance Demonstration Template included in this Appendix.

(3) Within five years from lodging of the Consent Decree, allowable short-term (lb/hour) VOC emission limits will be established for the VOC emission units listed above (P032, P033, P034, P040, P058, P037, P057, P031, P052, P088, P067, P582, & P072). All VOC performance testing shall be conducted through the use of U.S. EPA Reference Test Method 25A. The allowable short-term VOC emission limits will be based on the average of the initial performance test runs. The measured data based upon U.S. EPA Reference Test Method 25A shall be converted to a pound per hour basis, and multiplied by a factor of 2.2, plus the standard deviation times 2.92 divided by the square root of the number of test runs. The number of test runs shall be not less than three. In the event a new VOC test method is promulgated by U.S. EPA, for purposes of demonstrating compliance with any allowable short-term VOC limits, Cargill shall, within 12-months of a request by RAPCA to use such new method, conduct emissions testing using the new method and establish revised allowable VOC limits based on the average of the measured test runs of that new methodology plus the standard deviation times 2.92 divided by the square root of the number of test runs. The number of test runs shall be not less than three. In the event the new promulgated U.S. EPA test method results in a more stringent allowable short-term VOC emissions limit for any of the VOC emission units identified in this Appendix J, Cargill shall demonstrate compliance with the new short-term limit within 24 months of the date of testing through use of the new promulgated U.S. EPA test method. Compliance demonstration with the ozone cap will not change in the event of promulgation of a new test method and always will be demonstrated using the test methodology specified in note 2 above.

(4) For emission inventory purposes, including payment of emission fees, Cargill shall use the emission factor specified in note 2, above. In the event a new VOC test method is promulgated by U.S. EPA, Cargill shall, within 12-months of a request by RAPCA to use such new method, conduct testing of the VOC units listed above using the new method and use the results of such new method for completion of subsequent emission inventory submittals.

# Appendix J – Dayton, Ohio Corn Processing Ozone Cap

Ozone Cap Data Recording and Compliance Demonstration Template

No <sub>x</sub>									
Unit ID	Source (Units IDs)	Parameter monitored	Month throughput	Units	Emission factor	Units	Emissions (tons for month)	Data/Emissions Source	
B004	PC Boiler (B004)	NO <sub>x</sub>	Input directly from NO <sub>x</sub> CEM*					CEM Data (Per Part 60)	
B005	#3 Boiler (B005)	NO <sub>x</sub>						CEM Data (Per Part 60)	
B006	#4 Boiler (B006)	NO <sub>x</sub>						CEM Data (Per Part 60)	
<b>Total Month Emissions</b>								0.00	

VOC									
Unit ID	Source	Parameter monitored	Month throughput	Units	Emission factor ***	Units	Emissions (tons for month)	Data/Emissions Source	
P057	Gluten/Germ Dryers	corn		bushels		lb/bushel	0.00	Stack Test	
P067	Carbon Furnace - CS	carbon		tons		lb/ton	0.00	Stack Test	
P072	Gluten Dryer	corn		bushels		lb/bushel	0.00	Stack Test	
P582	Carbon Furnace - FX	carbon		tons		lb/ton	0.00	Stack Test	
**	Main Stack	corn		bushels		lb/bushel	0.00	Stack Test	
<b>Total Month Emissions</b>								0.00	

\* CEM emission concentrations are converted to mass emissions by using the flow as determined by the continuous flow monitor.

\*\* Main stack sources include: P032, P033, P034, P037, P040, P058

\*\*\* Emission factors will be based on most recent stack testing results. Individual unit emission factors and emissions (tons per month) will be recorded and 12-month rolling sum calculated for each month by the 15th of the following month.

<b>Total Monthly Emissions</b>	0.00
--------------------------------	------

**Appendix K**

**Corn Processing CO Emission Control Plan**

**Appendix K - Corn Processing CO Emission Control Plan**

Facility	Emission Unit Description and Number	Control Device Description	Emission Limit	Parameters Monitored	Compliance Operating Range	Parameter Monitoring Frequency	Schedule (years from logging of Consent Decree)
Blair	Carbon Furnace - Fructose - (58)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Blair	Gluten Drying Flash (8)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Carbon Furnace - Corn Syrup - (EU32)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Cedar Rapids	Feed Drying - Rotary - (EU-72-FD)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Feed Drying - STD - (EU-72-FD)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Germ Drying - Fluid Bed - (EU-113)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Germ Drying - Fluid Bed - (EU-20)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Gluten Drying - STD - (EU-20)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Gluten Drying - STD - (EU-20)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Carbon Furnace - Corn Syrup - (P067)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Dayton	Carbon Furnace - Fructose - (P582)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Dayton	Gluten Drying - Flash - (P057)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P031)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P052)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P088)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Gluten Drying - Flash - (P072)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Carbon Furnace	Zero hearth furnace or thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Carbon Furnace	Zero hearth furnace or thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Feed Drying - Rotary	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dimmitt	Carbon Furnace - (S-304)	Zero hearth furnace or thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Eddyville	Carbon Furnace - (37.000)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Eddyville	Carbon Furnace - (56.000)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3

**Appendix K - Corn Processing CO Emission Control Plan**

Facility	Emission Unit Description and Number	Control Device Description	Emission Limit	Parameters Monitored	Compliance Operating Range	Parameter Monitoring Frequency	Schedule (years from lodging of Consent Decree)
Hammond	Carbon Furnace - (104-01-R)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Hammond	Feed Drying - Rotary - (124-01-G)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Hammond	Germ Drying - Rotary - (21A-02-G)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Hammond	Germ Drying - Rotary - (51A-02-G)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Carbon Furnace - Corn Syrup - (6008)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Carbon Furnace - Fructose - (9002)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Carbon Furnace - Fructose - (9008)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Gluten Drying - Flash - (4008B)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Gluten Drying - Flash - (4011)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Germ Drying - STD - (4011)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Germ Drying - STD - (4011)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Wahpeton	Carbon Furnace - Fructose - (REP41)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3

Comments:

In addition, for unit(s) controlled by RTOs not designed for on-line regeneration (i.e., bake-out) and that are not preceded by a WESP or equivalent device(s), the emission limitations do not apply to periods of off-line RTO regeneration not to exceed 50 unit operating hours per calendar year and individual off-line RTO regeneration periods not to exceed 12 unit operating hours. For RTOs servicing more than one unit, a unit operating hour is any hour in which one or more of the unit is on line. Off-line RTO regeneration while all associated units are shut down is not included in these operating limitations. Also, off-line RTO regeneration periods that can be completed during unrelated shutdown, or malfunction periods (i.e., periods not related to the need to perform an off-line RTO regeneration) are not included in these limitations (i.e., Cargill may perform "preventative" off-line RTO regenerations during periods when the RTO is off-line for other reasons such as when the RTO is off-line due to maintenance or malfunction of upstream PM control equipment which requires bypass of the RTO). Cargill may petition EPA and the appropriate state or local regulatory agency to adjust these operating limitations for a specific RTO. With respect to the Dayton, OH facility, all on-line regeneration (bake-out) shall be conducted in accordance with OAC Rules 3745-15-06(A)(3) and 3745-15-06(B).

**Appendix L**

**Hammond Corn Processing Source SO<sub>2</sub> Emission Control Plan**

Appendix L - Hammond Corn Processing Process Source SO2 Emission Control Plan

Emission Unit-Description and Number	Control Device Description	Emission Limit	Parameters Monitored	Compliance Operating Range	Parameter Monitoring Frequency
Germ Drying-Rotary (21A-02-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Germ Drying-Rotary (51A-02-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Bran Dryer-Flash (89-01-G)	Scrubber	TBD (note 2)	pH	TBD (NOTE 1)	Once Each Day
Feed Dryer-Rotary (89-03-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Feed Drying-Rotary (124-01-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Gluten Dryer-Flash (121-01-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Germ Drying-Fluid Bed (124A-01-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Carbon Furnace (104-01-R)	Scrubber	TBD (note 2)	pH	TBD	Once Each Day

Notes:

- (1) The compliance operating range parameters shall be the same as those set forth in Appendix I for this unit.
- (2) To establish emission limits for the Bran Dryer (89-01-G) and Carbon Furnace (104-01-R), Cargill shall operate the scrubbers associated with these emission units at a pH equal to the average of the pH operating ranges for all other sources listed in Appendix L established for purposes of demonstrating compliance with the emission limits listed in Appendix L.

**Appendix M**

**Performance Testing Plan**

Appendix M - Performance Testing Plan

Facility	Emission Unit Description and Number	Pollutant Tested	Test Methodology	Testing Schedule
Blair	Carbon Furnace - Fructose - (58)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Blair	Gluten Drying - Flash - (8)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Blair	Steephouse Scrubber - (5)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Cedar Rapids	Carbon Furnace - Corn Syrup - (EU32)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Cedar Rapids	Feed Drying - Rotary - (EU-72-FD)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Feed Drying - STD - (EU-72-FD)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Germ Drying - Fluid Bed - (EU-113)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Germ Drying - Fluid Bed - (EU-20)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Gluten Drying - STD - (EU-20)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Gluten Drying - STD - (EU-20)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Steephouse Scrubber - (EU-41)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Dayton	Bran Dryer - Rotary - (P037) (note 1)	VOC	See note 1	By end of year 3 of lodging of the consent decree
Dayton	Bran Dryer - Rotary - (P040) (1)	VOC	See note 1	By end of year 3 of lodging of the consent decree
Dayton	Bran Dryer - Rotary - (P058) (1)	VOC	See note 1	By end of year 3 of lodging of the consent decree
Dayton	Carbon Furnace - Corn Syrup - (P067) (1)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Dayton	Carbon Furnace - Fructose - (P582) (1)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Dayton	Germ Drying - STD - (P031) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dayton	Germ Drying - STD - (P052) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dayton	Germ Drying - STD - (P088) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dayton	Gluten Drying - Flash - (P057) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dayton	Gluten Drying - Flash - (P072) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Decatur	Carbon Furnace	VOC, CO	Testing done per Appendix O	By end of year 5 of lodging of the consent decree
Decatur	Carbon Furnace	VOC, CO	Testing done per Appendix O	By end of year 5 of lodging of the consent decree
Decatur	Feed Drying - Rotary	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dimmitt	Carbon Furnace - (S-304)	VOC, CO	Testing done per Appendix O	By end of year 5 of lodging of the consent decree
Dimmitt	Package Boiler - S406	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Dimmitt	Package Boiler - S407	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Eddyville	Carbon Furnace - (37.000)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Eddyville	Carbon Furnace - (56.000)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Eddyville	Millhouse Scrubber - (102.000)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Eddyville	Millhouse Scrubber - (119.000)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Eddyville	Millhouse Scrubber - (9.000)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Fayetteville	Stoker Boiler - ES22	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Gainesville	Stoker Boiler - B001	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Hammond	Bran Dryer - Flash - (89-01-G)	VOC	TBD	By end of year 3 of lodging of the consent decree
Hammond	Carbon Furnace - (104-01-R)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Hammond	Feed Drying - Rotary - (124-01-G)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Hammond	Feed Drying - Rotary - (89-03-G)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Hammond	Germ Drying - Rotary - (21A-02-G)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Hammond	Germ Drying - Rotary - (51A-02-G)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Hammond	Package Boiler - 1002U	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Hammond	Gas Tube & Tile - 1003U	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Hammond	Germ Drying-Rotary - (21A-02-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Germ Drying-Rotary - (51A-02-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree

Appendix M - Performance Testing Plan

Facility	Emission Unit Description and Number	Pollutant Tested	Test Methodology	Testing Schedule
Hammond	Bran Dryer - Flash - (89-01-G)	SO2	40 CFR Part 60 Method 6	By end of year 3 of entry of the consent decree
Hammond	Feed Dryer - Rotary - (89-03-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Feed Drying - Rotary - (124-01-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Gluten Dryer - Flash - (121-01-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Germ Drying - Fluid Bed - (124A-01-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Carbon Furnace - (104-01-R)	SO2	40 CFR Part 60 Method 6	By end of year 3 of entry of the consent decree
Memphis	Bran Dryer - Rotary - (4003)	VOC	TBD	By end of year 3 of lodging of the consent decree
Memphis	Bran Dryer - Rotary - (4003)	VOC	TBD	By end of year 3 of lodging of the consent decree
Memphis	Carbon Furnace - Corn Syrup - (6008)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Memphis	Carbon Furnace - Fructose - (9002)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Memphis	Carbon Furnace - Fructose - (9008)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Memphis	Germ Drying - STD - (4011)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Memphis	Germ Drying - STD - (4011)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Memphis	Gluten Drying - Flash - (4008B)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Memphis	Gluten Drying - Flash - (4011)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Sidney	Stoker Boiler - B001	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Sidney	Stoker Boiler - B002	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Sioux City	Package Boiler - 17	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Wahpeton	Carbon Furnace - Fructose - (REP41)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Wahpeton	Gluten Drying - Flash - (FEP21)	VOC	TBD	By end of year 3 of lodging of the consent decree

Comments:

Where exhaust from a specific unit is commingled with exhaust from other sources, compliance will be based on emissions from only the specific unit.

Control Efficiency Testing shall be conducted for VOCs using 40 C.F.R. Part 60, Method 25A; for CO using 40 C.F.R. Part 60, Method 10; and for SO<sub>2</sub> using 40 C.F.R. Part 60, Method 6.

For units listed in Appendices H, I and K, if multiple listed units emit to a single system, Cargill shall demonstrate compliance with any applicable performance standards by demonstrating compliance at the system's end control device that emits to the atmosphere. If the listed units' exhaust is commingled with the exhaust of other units not listed in Appendices H, I and K, Cargill shall demonstrate compliance with the applicable performance standard based on the exhaust of the listed units only.

For new control devices installed after the date of lodging and pursuant to this Consent Decree, Cargill shall conduct testing required by this Appendix M within 180 days after start-up of the newly installed controls.

Notes:

- (1) In addition to the emission testing and other requirements of this Appendix M, Cargill shall also comply with the emissions testing requirements set forth in Appendix J.

**Appendix N**

**Extraction Solvent Loss Recordkeeping Template**



**Appendix O**

**Carbon Furnace Test Protocol**

## Appendix O

### **CARBON FURNACE TEST PROTOCOL**

#### **A Protocol For Determination Of Volatile Organic Compound And Carbon Monoxide Destruction Efficiency For Afterburners Installed On Carbon Furnace Exhausts.**

##### **INTRODUCTION**

The protocol sets forth the test methodology, technique and monitoring procedures that will be used to establish after burner operating temperatures required to achieve 95% reduction of volatile organic compounds (VOC) and 90% of carbon monoxide (CO) from carbon furnace exhausts.

##### **PROGRAM SCOPE AND TEST STRATEGY**

Because afterburners on carbon furnaces are an integrated part of the furnace, it is not possible to install inlet sampling ports to assess inlet VOC and CO concentrations. VOC and CO destruction efficiency for carbon furnace afterburners, therefore, will be determined by comparing uncontrolled conditions with the afterburner shut off (hereinafter referred to as "inlet" conditions), to controlled emissions with the afterburner operating.

Sequential testing of the carbon furnace with the afterburner shut off and with it operating will be completed such that a minimum amount of time elapses between each "inlet" and outlet test. Although time between each inlet and outlet test will be primarily dictated by the amount of time needed for the afterburner to reach a proper operating temperature or cool down, additional measures will be employed to minimize the time between tests. These measures will include dedicating separate analyzers and heated sample lines for the "inlet" and outlet locations (reduces calibration time as well as the time needed to reach a stable sample line background level). Velocity traverses also will be configured so as not to delay testing (see schedule below). Each test run will consist of one 60-minute outlet test (after burner operating), a period between tests where the afterburner is allowed to cool down, and one 60-minute "inlet" test. In all, a total of three runs totaling 120-minutes of measured data each (60 outlet, 60 inlet) will be completed per unit. Emissions between the two 60-minute segments of each test run while the afterburner is cooling down will not be included in the test result. Prior to the second and third test runs time will be allowed to operate and stabilize the afterburner.

For each test run, gas stream velocity, temperature, moisture and fixed gases will be determined to allow for the calculation of gas stream volumetric flowrate. Velocity traverses will be completed for each "inlet" and outlet test. In addition, moisture will be determined during each test (one moisture determination per "inlet" and outlet test) for a total of 6 moisture runs. Fixed gases also will be determined for each test via collection of an integrated sample and analysis in accordance with EPA Method 3. Accordingly, testing of the carbon furnace afterburners for destruction efficiency will be completed as follows:

- Complete Run 1 outlet (controlled condition) velocity traverse.
- Conduct Run 1 outlet test for VOC, CO, moisture, and fixed gases with the afterburner on. Test run duration will be 60 minutes.
- Turn off the afterburner and wait until the temperature in the afterburner is stabilized and within 100 degrees F of the feed hearth temperature.

- Complete Run 1 "inlet" test for VOC, CO, moisture, and fixed gases for 60 minutes. Conduct Run 1 "inlet" velocity traverse.
- Complete Runs 2 and 3 duplicating the steps cited above for Run 1.

## GENERAL SOURCE DESCRIPTION

Activated carbon is used to remove natural impurities present in corn syrup. As the carbon adsorbs impurities from the corn syrup, the carbon becomes saturated (spent) with those impurities and becomes less effective. Once the carbon is no longer useful for the process, the carbon is recycled through regeneration in the carbon furnaces.

Carbon regeneration occurs as the spent carbon is fed into the top sections of the multi-hearth furnace. The carbon passes through three separate zones within the furnace. In each zone, the carbon is subjected to different temperatures and atmospheres to drive off the impurities and restore the carbon. A rotating central shaft circulates a rabble arm that mixes and advances the carbon through the hearths exposing them to the counter-current flow of gases.

The three reaction zones, or steps, that occur in the furnace are drying, pyrolysis, and activation.

- A. In the drying, or heating zone (which is the closest zone to the afterburner), water is evaporated off the carbon through the counter-current action of the hot combustion gases. The temperature of the drying zone is approximately 600-1300°F on a six-hearth and 500-1000°F on an eight-hearth furnace.
- B. In the second zone, or pyrolysis zone, the temperature is raised to approximately 1300-1700°F in an oxygen-free atmosphere. Under these conditions, the adsorbed organic impurities are pyrolyzed and volatiles are driven off.
- C. The third zone is the gasification, or activation zone. The temperature in this area approaches 1800°F. The residues from the carbon are oxidized in a manner that prevents damage to the original carbon pore structure. If the carbon is not heated to reaction temperature, or the carbon is improperly dried, the reaction of water vapor, CO<sub>2</sub>, and adsorbate will not proceed in an effective regeneration process. Once the carbon passes through the final zone of the multiple hearth furnace, the carbon is sent to the quench tank, and then pumped back to the process.

The afterburner, which follows the drying zone of the furnace, is intended to burn the organic compounds driven off of the carbon that do not burn in the furnace.

During the times of testing, the carbon furnace will be operated at or near its rated throughput capacity.

## SAMPLING LOCATION DESCRIPTION

Use or installation of test ports and selection of velocity traverse points will be done in accordance with EPA Method 1 criteria.

## MONITORING PROCEDURES

VOC and CO measurements and flow monitoring will be completed using the following methods

- Total Gaseous Organics (VOC) - EPA Method 25A
- Carbon Monoxide (CO) – EPA Method 10
- Stack Gas Volumetric Flow Rate - EPA Method 2
- Fixed Gases - EPA Method 3
- Stack Gas Moisture - EPA Method 4

The following provides a description of the sampling and analytical methods to be employed.

### VOC (Total Gaseous Organics) - EPA Method 25A

Emissions testing for VOC will be completed in accordance with EPA Method 25A. In this procedure, stack gas is delivered directly to a heated TGO analyzer equipped with a flame ionization detector (FID). The analyzer is calibrated with known concentrations of propane and results are expressed as propane equivalents.

The sample delivery system consists of an in-stack sintered particulate filter and stainless steel sample probe, a three-way valve assembly for delivery of calibration gases to the system probe, a heat-traced Teflon sample line and sample pump. Sample gas is delivered to the FID analyzer on a wet basis and subsequently converted to dry conditions for calculation of a mass emission rate.

The TGO monitors will be VIG-20 Flame Ionization analyzers. The analyzers are expected to be operated in the 0-10,000 ppm range for the inlet location and the 0-100 ppm range for the outlet. The output signals from each analyzer is connected to strip chart recorders as well as an IBM PC, equipped with a Strawberry Tree, analog to digital converter and Workbench® data acquisition system software. This software provides data in 1-minute averages and calculates TGO emission rates in terms of parts per million (ppmv) and pounds per hour (lbs/hr) for each 1-minute average and for each test run.

### Carbon Monoxide – EPA Method 10

Carbon Monoxide will be determined in accordance with EPA Method 10, modified to eliminate the ascarite trap used for CO<sub>2</sub> removal. Use of the ascarite trap is not needed for NDIR analyzers which use the gas filter correlation technique to eliminate CO<sub>2</sub> interference. Samples will be collected in conjunction with each test run using the integrated tedlar bag sampling approach described in the method. At the conclusion of each test run, the contents of the integrated tedlar bag will be analyzed for carbon monoxide concentration using a non-dispersive infrared analyzer (NDIR) with gas filter correlation in accordance with the requirements of EPA Method 10. The analyzer will be calibrated using zero gas and two upscale standards as cited in the test method. All other QC requirements specified by the method will be employed.

### Stack Gas Volumetric Flowrate – EPA Method 2

Vent stream volumetric flowrate will be determined in conjunction with each test run in accordance with EPA Method 2. Gas stream temperature and moisture will also be determined in association with each flowrate determination. Temperature will be determined using a thermocouple and pyrometer and gas stream moisture via EPA Method 4.

As previously stated, gas stream velocity will be determined in conjunction with each test (before or after each TGO test) while moisture and fixed gases will be measured simultaneous with each TGO test run. The traverse will be completed across two stack diameters as specified in EPA Method 2. All test ports and traverse points will meet the minimum criteria specified in EPA Method 1.

#### Fixed Gases (O<sub>2</sub>, CO<sub>2</sub>)

Fixed gas (O<sub>2</sub>, CO<sub>2</sub>) measurement used for the determination of stack gas molecular weight will be completed in accordance with EPA Method 3, "Gas Analysis for the Determination of Dry Molecular Weight". This procedure involves collection of an integrated sample followed by analysis for fixed gases using an Orsat analyzer. O<sub>2</sub>, CO<sub>2</sub> are measured directly and N<sub>2</sub> is determined by difference.

#### Stack Gas Moisture

Stack gas moisture will be measured in accordance with the EPA Method 4, "Determination of Moisture Content in Stack Gases", 40 CFR 60, Appendix A. In this procedure a known volume of stack gas is extracted at a fixed rate through a series of water impingers and silica gel and the collected condensate is measured to determine the gas stream percent moisture. Moisture will be determined simultaneous with each 60-minute inlet and outlet test.

### **TEST METHOD REFERENCES AND MODIFICATIONS**

The following provides detailed references for the test methods proposed for this program. Proposed reference method modifications are listed following the appropriate reference.

1. VOC's -- EPA Method 25A, Measurement of Total Gaseous Organic Concentration Using a Flame Ionization Detector, 40 CFR 60, Appendix A. Calibration standards will be prepared using a propane standard in accordance with the method.
2. CO -- EPA Method 10, Determination of Carbon Monoxide Emissions from Stationary Sources, 40 CFR 60, Appendix A.
3. Flow -- EPA Method 2, 40 CFR 60, Appendix A.
4. Moisture -- EPA Method 4, Determination of Moisture Content in Stack Gases - 40 CFR 60, Appendix A.
5. Fixed Gases (O<sub>2</sub>, CO<sub>2</sub>) -- EPA Method 3, Gas Analysis for Determination of Dry Molecular Weight - 40 CFR 60, Appendix A.

### **DATA REDUCTION REQUIREMENTS**

Concentration data from the Method 25A analysis will be reduced for each operating condition, and converted to a pounds of VOC and CO emitted per hour (lb/hr). The "inlet" or uncontrolled condition lb/hr rate will be compared to the outlet or controlled lb/hr rate and a determination of the percent reduction will be made. The results of each test run as well as the percent reduction will be reported to the agency as follows:

Test Run	Inlet Emissions VOC or CO		Outlet Emissions VOC or CO		Destruction Efficiency (%)
Test Run 1		ppmv		ppmv	
		lb/hr		lb/hr	
Test Run 2		ppmv		ppmv	
		lb/hr		lb/hr	
Test Run 3		ppmv		ppmv	
		lb/hr		lb/hr	
Ave ppmv		ppmv		ppmv	
Ave lb/hr		lb/hr		lb/hr	

Destruction efficiency will be calculated using the following equation:

$$Eff = \frac{C_i - C_o}{C_i}$$

Where:

*Eff* = Overall destruction efficiency

*C<sub>i</sub>* = Inlet lb/hr emission rate

*C<sub>o</sub>* = Outlet lb/hr emission rate

**Appendix P**

**Supplemental Environmental Projects**

## Appendix P

### Supplemental Environmental Projects

**Elimination of Gaseous Sulfur Dioxide – Blair, NE, Cedar Rapids, IA, Dayton, OH, Eddyville, IA and Memphis, TN** - Cargill has historically stored gaseous sulfur dioxide at corn wet milling facilities for use in the production process. Gaseous sulfur dioxide is viewed as posing significant environmental and health risks and its storage and use is regulated under 40 CFR Part 68 (Chemical Accident Prevention Provisions) and 29 CFR Part 1910.119 (Process Safety Management of Highly Hazardous Chemicals). Gaseous sulfur dioxide storage exceeds the 40 CFR Part 68 thresholds at Blair, Cedar, Dayton, Eddyville, and Memphis and total gaseous sulfur dioxide storage exceeds 1.2 million pounds at these facilities. This project involves permanent replacement of gaseous sulfur dioxide used in the corn wet milling process with a less hazardous substitute, liquid sodium bisulfide (SBS), which is not subject to either risk management or process safety plan requirements. Project scope will include installation of tanks, piping, and controls for systems located in Blair, Cedar, Dayton, Eddyville, and Memphis, purchase of SBS, and removal of gaseous SO<sub>2</sub> handling capabilities. This project will benefit the environment by eliminating the risk of SO<sub>2</sub> releases through the removal of over 1.2 million pounds of sulfur dioxide storage and reduced SO<sub>2</sub> emissions from facility processes. It is also anticipated that this project would reduce fugitive sulfur dioxide emissions.

**Pilot VOC and HAP Reduction Project—Memphis, TN Oxidized Starch Process** – VOCs and HAPs are formed in the oxidized starch production process primarily by the reaction of hypochlorite, a bleaching agent, with impurities in the starch. This innovative pollution reduction project will reduce the formation of VOCs and HAPs in the oxidized starch production process, thus reducing associated emissions. The project scope includes the installation and operation of new equipment designed to reduce impurity levels in starch production. Studies by Cargill have determined that reduced impurity levels can significantly reduce formation of VOCs and HAPs in the process. It is anticipated that this project could reduce VOC and HAP emissions from this process by up to 30 percent.

**Elimination of Ozone Depleting Substance – Eddyville, IA and Blair, NE – R22** (chlorodifluoromethane) is used in condensers at Cargill's Blair, NE and Eddyville, IA ethanol loadout facilities. These condensers are BACT control devices installed and operated pursuant to the sources' PSD permit. This project is to permanently replace these condensers with an equivalent or better VOC control that results in the removal of R22. Cargill shall not use any of the retired condensers within any of its other facilities (except with a Non-Ozone Depleting Refrigerant) and all refrigerant from the retired condensers shall be either sent for destruction in accordance with the provisions of 40 C.F.R. Part 82.104(h), or reclaimed as defined in 40 C.F.R. Part 82.152, by a certified reclaimer as defined in 40 C.F.R. Part 82.164. This project will benefit the environment by the removal and destruction of over 700 pounds of an ozone depleting substance.

**Appendix Q**

**Notice and Penalty Payment**

**APPENDIX Q**  
**NOTICE AND PENALTY PAYMENT PROVISIONS**

**The United States**

**Payment of penalties:**

Payment shall be made in accordance with paragraphs 40 through 42, paragraphs 57 through 59, and paragraph 84 of the Consent Decree.

**Contact persons for notices:**

Information shall be sent to the appropriate Plaintiffs in accordance with paragraph 84 of the Consent Decree at the addresses below.

**U.S. EPA HQ**

**Technical Contact:**

Cary Secrest  
Environmental Protection Specialist  
US EPA Air Enforcement Division (Mail Code 2242A)  
Ariel Rios Building Room 2119  
1200 Pennsylvania Ave., N.W.  
Washington, DC 20460 [for Fed Ex/UPS use ZIP 20004]  
[secrest.cary@epa.gov](mailto:secrest.cary@epa.gov)

Phone: 202-564-8661  
Fax: 202-564-0053  
Cell: 202-236-3499  
Air Lab: 410-305-3069

**Counsel:**

Charlie Garlow  
US EPA Air Enforcement Division (Mail Code 2242A)  
Ariel Rios Building Room 2111A  
1200 Pennsylvania Ave., N.W.  
Washington, DC 20460 [for FedEx/UPS use ZIP 20004]  
[garlow.charlie@epa.gov](mailto:garlow.charlie@epa.gov)

Phone: 202-564-1088  
Fax: 202-564-0068

**U.S. EPA Region 4**

**Technical Contacts:**

Jason McDonald  
US EPA Region 4  
Atlanta Federal Center  
61 Forsyth St. S.W.  
Atlanta, GA 30303  
[mcdonald.jason@epa.gov](mailto:mcdonald.jason@epa.gov)  
Phone: 404-562-9203  
Fax: 404-562-9164

Kevin I. Taylor  
US EPA Region 4  
Atlanta Federal Center  
61 Forsyth St. S.W.  
Atlanta, GA 30303  
[taylor.kevin@epa.gov](mailto:taylor.kevin@epa.gov)  
Phone: 404-562-9134  
Fax: 404-562-9164

**Counsel:**

Gregory R. Tan  
Associate Regional Counsel  
US EPA Region 4  
61 Forsyth St. S.W.  
Atlanta, GA 30303  
[tan.gregory@epa.gov](mailto:tan.gregory@epa.gov)  
Phone: 404-562-9697  
Fax: 404-562-9486

**Please also cc:**

Angelia Souder Blackwell  
US EPA Region 4  
Office of Environmental Accountability  
61 Forsyth St. S.W.  
Atlanta, GA 30303  
[blackwell.angelia@epa.gov](mailto:blackwell.angelia@epa.gov)  
Phone: 404-562-9527  
Fax: 404-562-9664

**U.S. EPA Region 5**

**Technical Contacts:**

Compliance Tracker  
US EPA Region 5  
77 W. Jackson Blvd AE-17J  
Chicago, IL 60604  
Phone: 312-886-6797  
Fax: 312-353-8289

**Counsel:**

Kathleen Schnieders  
US EPA Region 5  
77 W. Jackson Blvd C-14J  
Chicago, IL 60604  
[schnieders.kathleen@epa.gov](mailto:schnieders.kathleen@epa.gov)  
Phone: 312-353-8912  
Fax: 312-886-0747

**U.S. EPA Region 6**

**Technical Contact:**

Raymond Magyar (6EN-AA)  
Air Enforcement Section  
US EPA Region 6  
1445 Ross Avenue Suite 1200  
Dallas, TX 75202  
[magyar.raymond@epa.gov](mailto:magyar.raymond@epa.gov)  
Phone: 214-665-7288  
Fax: 214-665-3177 or 214-665-7446

**Counsel:**

Patricia Capps Welton (6RC-EA)  
Air/Toxics Enforcement Branch  
Office of Regional Counsel  
US EPA Region 6  
1445 Ross Avenue Suite 1200  
Dallas, TX 75202-2733  
[Welton.patricia@epa.gov](mailto:Welton.patricia@epa.gov)  
Phone: 214-665-7327  
Fax: 214-665-3177

**U.S. EPA Region 7**

**Technical Contact:**

Richard Tripp ARTD/APCO  
US EPA Region 7  
901 N. 5<sup>th</sup> St.  
Kansas City, KS 66101  
[tripp.richard@epa.gov](mailto:tripp.richard@epa.gov)  
Phone: 913-551-7566  
Fax: 913-551-9566

**Counsel:**

Belinda Holmes CNSL/REGE  
Senior Assistant Regional Counsel  
US EPA Region 7  
901 N. 5<sup>th</sup> St.  
Kansas City, KS 66101  
[holmes.belinda@epa.gov](mailto:holmes.belinda@epa.gov)  
Phone: 913-551-7714  
Fax: 913-551-7925

**U.S. EPA Region 8**

**Technical Contact:**

Air Program Director c/o Scott Whitmore (8ENF-AT)  
Office of Enforcement, Compliance & Environmental Justice  
US EPA Region 8  
999 18<sup>th</sup> Street, Suite 300  
Denver, CO 80202-2466  
[Whitmore.scott@epa.gov](mailto:Whitmore.scott@epa.gov)  
Phone: 303-312-6317  
Fax: 303-312-6191

**State of Alabama**

**Payment of penalties:**

The check must be made payable to the "Alabama Department of Environmental Management." Please make a notation on the check that it is for the Air Division and mail the check to:

Alabama Department of Environmental Management  
Air Division

P.O. Box 301463  
Montgomery, AL 36130-1463  
Attention: Clai Mullens

**Contact person for notices:**

Ronald W. Gore  
Alabama Department of Environmental Management  
Air Division  
P.O. Box 301463  
Montgomery, AL 36130-1463  
[rwg@adem.state.al.us](mailto:rwg@adem.state.al.us)  
Phone: 334-271-7861  
Fax: 334-279-3044

**State of Georgia**

**Payment of penalties:**

The check must be made payable to the Georgia Department of Natural Resources and must be mailed to:

Georgia Air Protection Branch  
4244 International Parkway, Suite 120  
Atlanta, GA 30354, Attn. Lou Musgrove

**Contact person for notices:**

Lou Musgrove, Program Manager  
Stationary Source Compliance Program  
Georgia Air Protection Branch  
4244 International Parkway, Suite 120  
Atlanta, GA 30354  
[Lou\\_Musgrove@dnr.ga.state.us](mailto:Lou_Musgrove@dnr.ga.state.us)  
Phone: 404-363-7018  
Fax: 404-363-7100

**State of Illinois**

**Payment of penalties:**

The check shall be made payable to the "Illinois EPA for deposit into the Illinois

Environmental Protection Trust Fund” and mailed to:

Illinois Environmental Protection Agency  
Fiscal Services  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276

**Contact person for notices:**

Ms. Julie K. Armitage  
Illinois Environmental Protection Agency  
Bureau of Air  
Compliance and Enforcement Section  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276  
Julie.Armitage@epa.state.il.us  
Phone: 217-782-5811  
Fax: 217-782-6348

**State of Indiana**

**Payment of penalties:**

Check must be made payable to the “Environmental Management Special Fund.” The check must include the case number of this action and shall be mailed to:

Cashier—Mail Code 50-10C  
Indiana Department of Environmental Management  
100 N. Senate Avenue  
Indianapolis, IN 46204-2251

NOTE: The IDEM case numbers assigned to this case are 2005-14673-A (Layfayette) and 2005-14646-A (Hammond). Please place these numbers on the check so the Cashier will post the check to the appropriate account codes.

**Contact person for notices:**

Matthew Stuckey  
Senior Environmental Manager  
Office of Enforcement/Air Section – Mail Code 60-02  
Indiana Department of Environmental Management

100 N. Senate Ave.  
Indianapolis, IN 46204-2251  
mstuckey@dem.state.In.us  
Phone: 317-233-1134  
Fax: 317-233-5968

**State of Iowa**

**Payment of penalties:**

The check must be made to the order of "The State of Iowa" and mailed to:

David R. Sheridan  
Assistant Attorney General  
Environmental Law Division  
Lucas State Office Building  
321 E. 12th Street, Room 018  
Des Moines, IA 50319

**Contact person for notices:**

Brian Hutchins, Supervisor  
Air Compliance Section  
Air Quality Bureau, Iowa DNR  
7900 Hickman Rd., Suite 1  
Urbandale, IA 50322  
Brian.Hutchins@DNR.state.ia.us  
Phone: 515-281-8448  
Fax: 515-242-5094

**Linn County, Iowa**

**Payment of penalties:**

Checks must be made to the order of "Linn County Air Quality Division c/o the Linn County Treasurer," and must be mailed to:

Linn County Public Health Department  
501 13<sup>th</sup> St. NW  
Cedar Rapids, IA 52405

**Contact person for notices:**

Gregory D. Slager  
Air Pollution Control Officer  
Linn County Public Health Department  
501 13th St. NW.  
Cedar Rapids, IA 52405  
Greg.Slager@linncounty.org  
Phone: 319-892-6010  
Fax: 319-892-6099

**Polk County, Iowa**

**Payment of penalties:**

Checks must be made to the order of the "Polk County Treasurer," and mailed to:

Polk County Treasurer  
Polk County Air Quality Division  
5885 NE 14<sup>th</sup> Street  
Des Moines, IA 50313

**Contact person for notices:**

Gary Young, Air Quality Engineer  
Polk County Air Quality Division  
5885 NE 14<sup>th</sup> Street  
Des Moines, IA 50313  
gyoung@co.polk.ia.us  
Phone: 515-286-3372  
Fax: 515-875-5599

**State of Missouri**

**Payment of penalties:**

The check must be payable to the State of Missouri, followed by the name of the county, in parentheses, in which the facility is located ("State of Missouri (Clay County)"). The check should be mailed to the attention of:

Jo Ann Hovath

Assistant Attorney General  
P.O. Box 899  
Jefferson City, MO 65102-0899

**Contact persons for notices:**

Timothy P. Duggan  
Assistant Attorney General  
P.O. Box 899  
Jefferson City, MO 65102-0899  
[tim.duggan@ago.mo.gov](mailto:tim.duggan@ago.mo.gov)  
Phone: 573-751-9802  
Fax: 573-751-8464

Steve Feeler  
Air Pollution Control Program  
Missouri Department of Natural Resources  
P.O. Box 176  
Jefferson City, MO 65102  
[steve.feeler@dnr.mo.gov](mailto:steve.feeler@dnr.mo.gov)  
Phone: 573-751-4817  
Fax: 573-751-2706

**State of Nebraska**

**Payment of penalties:**

The check must be made payable to "Treasurer of Washington County, Nebraska," with the notation "civil penalty," and must be mailed to:

Jodi M. Fenner  
Assistant Attorney General  
2115 State Capital Building  
Lincoln, NE 68509-8920

**Contact person for notices:**

Shelly Kaderly  
Air Division Administrator  
1200 "N" Street, Suite 400

P.O. Box 98922  
Lincoln, NE 68509-8922  
[Shelly.kaderly@ndeq.state.ne.us](mailto:Shelly.kaderly@ndeq.state.ne.us)  
Phone: 402-471-4299  
Fax: 402-471-2909

**State of North Carolina**

**Payment of penalties:**

The check shall be made payable to "North Carolina Department of Environment and Natural Resources." Please note that a memo on the check should refer to "STL 2005-001." The check shall be mailed to:

Enforcement Group - Payment  
Department of Environment and Natural Resources  
Division of Air Quality  
1641 Mail Service Center  
Raleigh, NC 27699-1641

**Contact person for notices:**

Lee A. Daniel, Chief  
Technical Services Section  
NC Division of Air Quality  
1641 Mail Service Center  
Raleigh, NC 27699-1641  
[Lee.Daniel@ncmail.net](mailto:Lee.Daniel@ncmail.net)  
Phone: 919-733-1471  
Fax: 919-733-1812

**State of North Dakota**

**Payment of penalties:**

The check must be made payable to "North Dakota Department of Health" and mailed to:

Dave D. Glatt, Chief  
Environmental Health Section  
North Dakota Department of Health  
P.O. Box 5520  
Bismarck, ND 58506-5520

**Contact person for notices:**

Benjamin Gress  
Division of Air Quality  
North Dakota Department of Health  
P.O. Box 5520  
Bismarck, ND 58506-5520  
[bgress@state.nd.us](mailto:bgress@state.nd.us)  
Phone: 701-328-5188  
Fax: 701-328-5200

**State of Ohio**

**Payment of penalties:**

The check for the portion of the penalty attributable to the Sidney, Ohio facility should be made out to "Treasurer, State of Ohio," and mailed or delivered to:

Amy Laws, Paralegal  
Environmental Enforcement Section  
Ohio Attorney General's Office  
30 Easte Broad, 25<sup>th</sup> Floor  
Columbus, OH 43215-3400

**Contact person for notices:**

Jim Orlemann, Assistant Chief  
SIP Development and Enforcement  
Ohio Environmental Protection Agency  
Lazarus Government Center  
Division of Air Pollution Control  
P.O. Box 1049  
Columbus, OH 43216-1049  
[Jim.Orlemann@epa.state.oh.us](mailto:Jim.Orlemann@epa.state.oh.us)  
Phone: 614-644-3592  
Fax: 614-644-3681

**Montgomery County/Regional Air Pollution Control Authority (RAPCA):**

**Payment of penalties:**

The check for the portion of the penalty attributable to the Dayton, Ohio facility must be made payable to the "Air Resources Study Trust Fund," and must be mailed to:

Bruno Maier  
RAPCA  
117 South Main Street  
Dayton, OH 45422-1280

**Contact person for notices:**

John A. Paul  
RAPCA Supervisor  
117 South Main Street  
Dayton, OH 45422-1280  
[paulja@rapca.org](mailto:paulja@rapca.org)  
Phone: 937-225-5948  
Fax: 937-225-3486

**Memphis/Shelby County, Tennessee:**

**Payment of penalties:**

The check must be made payable to "Memphis and Shelby County Health Department, Pollution Control Section" and should be mailed to:

Memphis and Shelby County Health Department, Pollution Control Section  
814 Jefferson Avenue, 4<sup>th</sup> Floor  
Memphis, Tennessee 38105  
Attn: Robert Rogers, P.E.

**Contact person for notices:**

Robert Rogers, P.E.  
Technical Manager  
Memphis and Shelby County Health Department  
Pollution Control Section  
814 Jefferson Avenue, 4<sup>th</sup> Floor  
Memphis, Tennessee 38105  
[brogers@mschdpollution.org](mailto:brogers@mschdpollution.org)  
Phone: 901-544-7587 or 7586  
Fax: 901-544-7308