

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT  
and  
TITLE I PERMIT<sup>1</sup>

PERMITTEE

Tyson Fresh Meats, Inc.  
Attn: Todd Reed  
Highway 92, P.O Box 28  
Geneseo, Illinois 61254

Application No.: 01040050

I.D. No.: 161817AAA

Applicant's Designation:

Date Received: April 9, 2001

Operation of: Meat Packing Plant

Date Issued: November 25, 2003

Expiration Date<sup>2</sup>: November 24, 2008

Source Location: Highway 92, Geneseo, Rock Island County

Responsible Official: Todd Reed, Complex Manager

This permit is hereby granted to the above-designated Permittee to OPERATE a Meat Processing and Packing Plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Anatoly Belogorsky at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:AB:psj

cc: Illinois EPA, FOS, Region 2

<sup>1</sup> This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

<sup>2</sup> Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Tyson Fresh Meats, Inc. - Joslin, IL  
Highway 92  
Geneseo, Illinois 61254  
309/658-3283

I.D. No.: 161817AAA  
Standard Industrial Classification: 2011, Meat Packing Plant

1.2 Owner/Parent Company

Tyson Foods, Inc.  
800 Stevens Port Drive  
Dakota Dunes, South Dakota 57049

1.3 Operator

Tyson Fresh Meats, Inc. - Joslin, IL  
Highway 92  
Geneseo, Illinois 61254

Kim Blankenship  
605/235-4801

1.4 General Source Description

Tyson Fresh Meats, Inc. is located in Geneseo and is a beef slaughter and integrated rendering facility.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
°C	Degrees Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
cfm	Cubic foot per minute
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System
CO	Carbon Monoxide
DRE	Destruction and Removal Efficiency
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
ft	Feet
G	Grams
gal	Gallon
gr	Grains
HAP	Hazardous Air Pollutant
HCl	Hydrogen Chloride
Hg	Mercury
HWC	Hazardous Waste Combustor
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kW	kilowatts
L	Liter
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
Mg	Milligrams
mg	Micrograms
mmBtu	Million British thermal units
mmscf	Million standard cubic feet
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NIC	Notification of Intent to Comply
NOC	Notification of Compliance
NO <sub>x</sub>	Nitrogen Oxides

NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
POHC	Principal Organic Hazardous Constituent
ppm	parts per million
ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plan
scf	Standard cubic feet
scm	Standard cubic meters
SO <sub>2</sub>	Sulfur Dioxide
TEQ	Toxic Equivalency Quotient
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
yr	Year

### 3.0 INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a) (1) and 201.211, as follows:

Aerosol Can Puncturing System  
Beech Russ Vacuum Pump  
Batch Vents-Tannery  
Chase Vents-Tannery  
Pickle Sump and Acid Day Tank-Tannery  
Reacidulate Tank-Tannery  
ProSolv Unit

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a) (2) or (a) (3), as follows:

None

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a) (4) through (18), as follows:

- a. Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a) (4)].
- b. Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a) (11)].
- c. Storage tanks of virgin or rerefined distillate oil, hydrocarbon condensate form natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a) (11)].

- d. Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].
- e. Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].
- f. Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].
- g. Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

### 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that

organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

### 3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12) (b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 1	Fuel Combustion Emission Units (Boilers and Heaters)	Boilers #1-#3: 1970 Boiler #4: 1984 Hot Water Heater: 1999 Kill Floor Heater: 1999 Other Heaters: After 1972	None
Unit 2	Kill Floor Processes	1998; 1999	None
Unit 3	Blood Drying and Rendering	1999; 2002	Venturi Scrubber and Packed Scrubber
Unit 4	Edible Rendering	After 1972; 1999 (Dryer)	Venturi Scrubber with Wet Cyclone Demister; Cyclones
Unit 5	Inedible Rendering	After 1972; 2001 (Steam Dryer)	Cyclone Impingement Tank; Direct Contact Demister; Venturi Scrubber; Packed Bed Scrubber; Baghouse; Dust Vacuum
Unit 6	Storage Silos	After 1972	Baghouse
Unit 7	Truck and Rail Loading	After 1972	Baghouse; Packed Bed Scrubber
Unit 8	Hide Splitter (Tannery)	1994	Cyclone
Unit 9	Wastewater Treatment Plant (3 Anaerobic Lagoons, Aeration Basin, 2 Covered Equalization Basins)	After 1972; One Lagoon, Cover, Flare and Scrubber were added in 2001	Packed Column Scrubber and BioGas Flare for Covered Lagoons
Unit 10	Gasoline Storage Tank	2001	Submerged Loading Pipe
Unit 11	Fugitive Emissions	N/A	None

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of NO<sub>x</sub>, CO, SO<sub>2</sub> and PM-10 emissions.

### 5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except the following as allowed by 35 IAC 212.123(b):

The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

### 5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 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 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

### 5.2.4 Risk Management Plan

- a. This stationary source, as defined in 40 CFR Section 68.3, is subject to 40 CFR Part 68, the Accidental Release Prevention regulations [40 CFR 68.215(a)(1)].
- b. The owner or operator of a stationary source shall revise and update the RMP submitted, as specified in 40 CFR 68.190.

- 5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

#### 5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source, which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
  - i. Illinois EPA, Compliance Section; and
  - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
  - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

#### 5.2.7 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. As a result of this application either not having been submitted or deemed complete by April 20, 1998, the source is required to comply with the requirements of 40 CFR Part 64 for large pollutant-specific emissions units in the initial application and CAAPP permit. The source must submit a CAM plan for all other affected pollutant-specific emissions units upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	56.37
Sulfur Dioxide (SO <sub>2</sub> )	151.52
Particulate Matter (PM)	209.31
Nitrogen Oxides (NO <sub>x</sub> )	174.04
HAP, not included in VOM or PM	-----
Total	591.24

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.5.3 Other Source-Wide Emission Limitations

None

## 5.6 General Recordkeeping Requirements

### 5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

### 5.6.2 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

## 5.7 General Reporting Requirements

### 5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

### 5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

## 5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

## 5.9 General Compliance Procedures

### 5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5.1 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 1 Fuel Combustion Emission Units

7.1.1 Description

The Joslin Facility operates four natural gas-fired boilers, each having the potential to burn #2 fuel oil or liquid petroleum gas as a back-up fuel alternative. Also, the boiler house contains a direct contact hot water heater, equipped with a low NO<sub>x</sub> burner that is used to provide hot process water to the kill floor. This water heater may also run on liquid petroleum gas as an alternative fuel.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 1:	<u>Boiler House</u>	
	<u>Boilers #1-#4</u>  Maximum Heat Input Capacity: #1-#3: 21 mmBtu/Hr Each #4: 40.4 mmBtu/Hr	None
	<u>Hot Water Heater</u>  Maximum Heat Input Capacity 26.0 mmBtu/Hr	None
	<u>Other Air Make-up &amp; Production Heaters</u>	None
	<u>Designation</u>	Heat Input Capacity, mmBtu/Hr
	HVAC Unit	2.5
	South Heater	6.0
East Heater	4.2	
West Heater	4.2	
Heater Make-Up	3.0	
Knock Box Heater	10.0	

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected fuel combustion emission unit" for the purpose of these unit specific conditions is a natural gas-fired boiler or heater each having the potential to burn #2 fuel oil or liquid petroleum gas and is used to produce steam, hot water or heat for the facility needs.

- b. Affected fuel combustion emission units (all boilers, Hot Water Heater, and Knock Box Heater) are subject to 35 IAC 216.121. No person shall cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected 50 percent excess air.
- c. Each affected fuel combustion emission unit which burns distillate fuel oil #2 shall not exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input (0.3 lb/mmBtu) pursuant to 35 IAC 214.122(b)(2). This emission standard is more stringent than the limit established in 40 CFR 60.42c(d) and supercede SO<sub>2</sub> emission standard that would be applied to the affected Hot Water Heater.
- d. The affected Hot Water Heater is subject only to the recordkeeping and reporting requirements of The New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. It should be noted, however, that the daily recordkeeping requirements for the fuel(s) burned as established by 40 CFR 60.48c(g) are vacated in the letter issued by USEPA Region VII on April 16, 1998 in response to request of the Iowa Department of Natural Resources.

#### 7.1.4 Non-Applicability of Regulations of Concern

- a. Each affected fuel combustion emission unit is not subject to 35 IAC 217.141, Emissions of Nitrogen Oxides from Existing Fuel Combustion Emission Sources in Major Metropolitan Areas, because the actual heat input of each affected fuel combustion emission unit is less than 73.2 MW (250 mmBtu/hr).
- b. The affected fuel combustion emission units (all air make-up heaters, excluding Knock Box Heater) are not subject to 35 IAC 216.121, Fuel Combustion Emission Sources, because the actual heat input from each such fuel combustion emission unit is less than 2.9 MW (10 mmBtu/hr).
- c. Pursuant to 35 IAC 215.303, fuel combustion emission units are not subject to 35 IAC Part 215, Subpart K: Use of Organic Material.
- d. The New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units constructed, reconstructed, or modified after June 9, 1989 and having a maximum heat input capacity of at

least 10 mmBtu/hr. All affected fuel combustion emission units (excluding Hot Water Heater) were either constructed prior to June 9, 1989 or having a maximum heat input capacity less than 10 mmBtu/hr. Therefore, these affected fuel combustion emission units are qualified for exemption from these rules.

- e. The New Source Performance Standard for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Db, applies to units constructed, reconstructed, or modified after June 19, 1984 and having a maximum heat input capacity of at least 100 mmBtu/hr. All affected fuel combustion emission units by having a maximum heat input capacity of less than 100 mmBtu/hr are qualified for exemption from these rules.
- f. The affected Hot Water Heater is not subject to the standard for particulate matter of 40 CFR 60.43c(a) because heat input capacity of this unit is less than 30 mmBtu/hr.

7.1.5 Operating Requirements and Work Practices

All affected fuel combustion emission units shall only be operated with natural gas, distillate fuel oil #2 or liquid petroleum gas as the fuel.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected fuel combustion emission units are subject to the following:

a. Hot Water Heater (with low NO<sub>x</sub> burner)

- i. Natural gas consumption shall not exceed 22 mmscf/month and 223 mmscf/year.
- ii. Emissions shall not exceed the following limits:

<u>Pollutant</u>	<u>Tons/Month</u>	<u>Tons/Year</u>
NO <sub>x</sub>	0.39	3.9
CO	0.94	9.37
PM	0.09	0.85
VOM	0.06	0.6

These limitations were established in Construction Permit 98040054. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new

major source or major modification pursuant to Title I of the CAA, specifically Major Stationary Sources Construction and Modification and Prevention of Significant Deterioration of Air Quality Regulations (PSD) of 40 CFR 52.21 [T1].

b. Boilers #1 - #3 (Per Each Boiler)

Emissions shall not exceed the following limits:

<u>Pollutant</u>	<u>Tons/Month</u>	<u>Tons/Year</u>
NO <sub>x</sub>	1.26	15.15
CO	0.22	2.63
PM	0.09	1.05
SO <sub>2</sub>	1.74	20.90
VOM	0.03	0.43

These limitations were established in Operating Permit 84060071. These limits ensure that the construction and/or modification addressed in the aforementioned Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically Major Stationary Sources Construction and Modification and Prevention of Significant Deterioration of Air Quality Regulations (PSD) of 40 CFR 52.21 [T1].

c. Boiler #4

Emissions shall not exceed the following limits:

<u>Pollutant</u>	<u>Tons/Month</u>	<u>Tons/Year</u>
NO <sub>x</sub>	3.03	36.43
CO	0.52	6.32
PM	0.21	2.53
SO <sub>2</sub>	4.18	50.25
VOM	0.33	1.04

These limitations were established in Operating Permit 84060071. These limits ensure that the construction and/or modification addressed in the aforementioned Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically Major Stationary Sources Construction and Modification and Prevention of Significant Deterioration of Air Quality Regulations (PSD) of 40 CFR 52.21 [T1].

- d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.1.7 Testing Requirements

None

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected fuel combustion emission units to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7) (b) of the Act:

- a. Total natural gas usage (mmscf/mo and mmscf/yr) for all affected fuel combustion emission units and separately for the Hot Water Heater and HVAC Heater;
- b. Total fuel oil #2 consumption for all affected fuel combustion emission units (gal/mo and gal/yr);
- c. Total liquid petroleum gas consumption for all affected fuel combustion emission units (gal/mo and gal/yr);
- d. Sulfur content in the oil #2, wt.%; and
- e. Monthly and annual emissions of regulated air pollutants as calculated in accordance with compliance procedures in Condition 7.1.12.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the emission limitations as follows pursuant to Section 39.5(7) (f) (ii) of the Act:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

- a. Compliance with Condition 7.1.3(b) is assumed to be achieved by work-practices inherent in operation of affected fuel combustion emission units, so that no compliance procedures are set in the permit addressing this regulation.
- b. Compliance with the emission limits established in Conditions 5.5.1 and 7.1.6 of this permit shall be based on the recordkeeping requirements of Condition 7.1.9 and the emission factors and formulas listed below:

i. Natural Gas Mode

Pollutant	Emission Factor (lb/mmscf)
PM	7.6
NO <sub>x</sub>	100.0 (35*)
VOM	5.5
CO	84.0

\* Manufacturer's emission factor used for low NO<sub>x</sub> burners of the Hot Water Heater

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, March 1998.

ii. Fuel Oil #2 Mode

Pollutant	Emission Factor (lb/1,000 gal)
PM	2.0
NO <sub>x</sub>	20.0
SO <sub>2</sub>	142S
CO	5.0

These are the emission factors for uncontrolled distillate fuel oil combustion, Table 1.3-1, Volume I, September 1998. "S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

iii. Liquid Petroleum Gas Mode

Pollutant	Emission Factor (lb/1,000 gal)
PM	0.6
NO <sub>x</sub>	19 (4.58*)
CO	3.2

\* Manufacturer's emission factor used for low NO<sub>x</sub> burners of the Hot Water Heater

These are the emission factors for uncontrolled distillate fuel oil combustion, Table 1.5-1, Volume I, September 1998.

7.2 Unit 2 Kill Floor Processes

7.2.1 Description

A decontamination system on the Kill Floor is used to ensure the safety and cleanliness of the meat being processed. In this system, beef carcasses pass through a Pre-Evisceration Acid Cabinet, a Carcass Acid Wash Cabinet, a Frigoscandia Pasteurization Cabinet, and a Post-Pasteurization Cabinet. In the Pre-Evisceration cabinet, a lactic, acetic, or citric acid solution may be sprayed on the outside of the beef carcass as it travels down the kill floor. Then, the carcass is gutted and continues to the Carcass Acid Wash Cabinet, where it may be doused again with acid solution. Next, in the a Frigoscandia Pasteurization Cabinet, the beef sides are dewatered in the water removal area, sprayed with hot steam, and then chilled with cold water. After this step, the beef sides pass through the Post-Pasteurization Cabinet where they may be sprayed with an acid solution before continuing to the Hot Box Cooler.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 2:	Pre-Evisceration Acid Cabinet	None
	Carcass Acid Wash Cabinet	None
	Pasteurization Cabinet	None
	Post-Pasteurization Cabinet	None

7.2.3 Applicability Provisions and Applicable Regulations

- a. The affected "kill floor process unit" for the purpose of these unit-specific conditions, is an emission unit described in Conditions 7.2.1 and 7.2.2.
- b. The affected kill floor process unit is subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

c. Each affected kill floor process unit is subject to 35 IAC Part 215, Subpart K, Use of Organic Material: No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in 35 IAC 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of Subpart K shall apply only to photochemically reactive material [35 IAC 215.301].

7.2.4 Non-Applicability of Regulations of Concern

This permit is issued based on the each affected kill floor process unit not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected kill floor process unit does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Operational and Production Limits and Work Practices

None

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected kill floor process units are subject to the following:

<u>Item of Equipment</u>	<u>Throughput (Tons/Hr) per Cabinet</u>	<u>VOM Emissions</u>	
		<u>(Lbs/Hr)</u>	<u>(Tons/Yr)</u>
All Cabinets	149	8.76	35.9

These limitations were established in Construction Permit 99030124. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically Major Stationary Sources Construction and Modification and Prevention of Significant Deterioration of Air Quality Regulations (PSD) of 40 CFR 52.21 [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected kill floor process units to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7) (b) of the Act:

- a. The amount (tons) of sides of raw beef pasteurized on a hourly basis.
- b. Number of sides raw beef on a monthly and annual basis.
- c. Hours of operation per year for each kill floor process unit.
- d. Emissions of VOM on the monthly and annual basis calculated in accordance with Compliance Procedures of Condition 7.2.12.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the emission limitations as follows pursuant to Section 39.5(7) (f) (ii) of the Act:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.3(b) and (c) is assumed to be achieved by work-practices inherent in operation of affected kill floor process units, so that no compliance procedures are set in the permit addressing this regulation.

b. Compliance with the emission limits established in Conditions 5.5.1 and 7.2.6 of this permit shall be based on the recordkeeping requirements of Condition 7.2.9 and the emission factors and formulas listed below:

i. Pre-Evisceration Acid Cabinet, Carcass Acid Cabinet, Post-Pasteurization Acid Cabinet:

Given:

Air Rate from Acid Cabinets: ft<sup>3</sup>/min;

Normal Room Air Conditions: 100°F dry bulb and 60% humidity;

Pounds of Water per Pound of Dry Air: 0.0253 at 100°F and 60% humidity;

Pounds of Water per Pound of Dry Air for Saturation in the Acid Cabinet: 0.0281 at 100°F and 60% humidity;

Amount of Water Air can Absorb: 0.0028 (0.0281 lb water/lb dry air - 0.0253 lb water/lb dry air);

Density of Water: 8.34 lb/gal;

Standard Air: 0.075 lb/cf;

Specific Volume of Dry Air: 12.61 cf/lb (0.075 lb/cf \* (100°F + 460K) / (70°F + 460K));

Percent Acid: %/100

$$\text{VOM} = \text{ft}^3 / \text{min} \times \frac{\text{Lb dry air}}{12.61 \text{ ft}^3} \times \frac{0.0028 \text{ lb H}_2\text{O}}{\text{lb dry air}} \times \frac{\text{lb acid, \% / 100}}{\text{lb H}_2\text{O}} \times \frac{1 \text{ ton}}{2000 \text{ lb}} \times \frac{60 \text{ min}}{\text{hr}} \times \frac{\text{hr}}{\text{yr}}$$

ii. Pasteurization Cabinet

VOM Emission Factor = 0.00403 lb/ton weight processed

VOM Emissions, Ton = 0.00403 x Head Processed x Average Weight (lb)/2000

7.3 Unit 3 Blood Drying and Rendering

7.3.1 Description

Raw blood is collected from the Kill Floor line or can be brought in under emergency situations from other facilities. This blood is processed further to recover the protein in order to make a blood meal product. The blood solids are coagulated by injected steam in an inclined, tubular vessel. The solids are then separated from the blood serum water in a solid bowl centrifuge. The solids slurry is passed into the Blood Dryer. The dried product is separated from the exhaust air via two heli-cyclone collectors and then blown to the Blood Silo for storage prior to load out.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 3:	Blood Dryer (JO-BD-2)	Venturi Scrubber (JO-CE-1) Packed Scrubber (JO-CE-2)
	Blood Rendering Air System (Jo-C-1) (Raw Blood Tank, Blood Centrifuge/Coagulator, Tallow Centrifuge, Inedible Pressers, Sludge Melt Tank, Tallow Works Tank, Tallow Polisher, Tallow Surge Tank, Milling Room Air, General Room Air)	Venturi Scrubber (JO-CE-1) Packed Scrubber (JO-CE-2)

7.3.3 Applicability Provisions and Applicable Regulations

- a. The "affected blood drying and rendering unit" for the purpose of these unit-specific conditions, is an emission unit described in Conditions 7.3.2 and 7.3.3.
- b. An affected blood drying and rendering unit is subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.305, and 219.304 and the following exception: If no odor nuisance exists this limitation shall apply only to photochemically reactive material.

#### 7.3.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected blood drying and rendering unit not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected blood drying and rendering unit does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

#### 7.3.5 Operational and Production Limits and Work Practices

- a. The maximum production of the affected blood dryer shall not exceed 688 tons/month and 6,570 tons/year of finished blood meal.
- b.
  - i. The maximum firing rate of the affected blood dryer shall not exceed 3.5 mmBtu/hr.
  - ii. Natural gas and propane shall be the only fuels fired in the affected blood dryer.
- c.
  - i. The Venturi scrubber and packed bed scrubber shall be in operation at all times when the affected blood dryer is in operation and emitting contaminants.
  - ii. The Permittee shall follow good operating practices for the scrubbers, including periodic inspection, routine maintenance and prompt repair of defects.

#### 7.3.6 Emission Limitations

Emissions from the packed bed scrubber, which controls the affected blood dryer, shall not exceed the following limits. Compliance with the annual limits shall be determined from a running total of 12 months of data.

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, packed bed scrubber, which controls the affected blood dryer is subject to the following:

<u>Pollutant</u>	<u>Emissions</u>	
	<u>(Lbs/Hr)</u>	<u>(Tons/Yr)</u>
PM	2.800	12.23
CP	0.089	0.39
NO <sub>x</sub>	0.218	0.96
VOM	0.063	0.23
SO <sub>2</sub>	0.007	0.04

These limitations were established in Construction Permit 02070088. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically Major Stationary Sources Construction and Modification and Prevention of Significant Deterioration of Air Quality Regulations (PSD) of 40 CFR 52.21 [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

- a. The Permittee shall maintain an operating and maintenance log for the Venturi scrubber and packed bed scrubber.
- b. The Permittee shall monitor the following information for the Venturi scrubber and the packed bed scrubber at least twice per shift at least two hours apart:
  - i. Scrubbant flow rate for each scrubber (gallons/minute); and
  - ii. Pressure drop for each scrubber.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected blood dryer to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain the following operational records:

- i. Type of scrubbant used in the scrubber systems;
  - ii. Production rate for the affected blood dryer (tons/month and tons/year); and
  - iii. Quantity and type of fuel burned in the affected blood dryer.
- b. The Permittee shall maintain records of the NO<sub>x</sub>, CO, VOM, SO<sub>2</sub>, and PM emissions (tons/month and tons/year) based on the Compliance Procedures of Condition 7.3.12.

#### 7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected blood drying and rendering unit with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

#### 7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

#### 7.3.12 Compliance Procedures

- a. Compliance with the particulate matter limitations of Condition 7.3.3(b) is assured and achieved by the work-practices inherent in operation of the affected blood drying and rendering unit.
- b. Compliance of the affected blood drying and rendering unit with PM emission limitations of Conditions 5.5.1 and 7.3.6 shall be based on the recordkeeping requirements of Condition 7.3.9 and the use of PM emission factor equal to 0.834 lb/hr derived from the stack test result conducted on the Packed Bed Scrubber in November 2002.

c. Compliance of the affected blood drying and rendering unit with emission limitations from fuel combustion in dryer shall be based on the recordkeeping requirements of Condition 7.3.9 and the use of the following standard emission factors:

i. Natural Gas Mode

Pollutant	Emission Factor (lb/mmscf)
PM	Counted in Condition (b)
NO <sub>x</sub>	100.0
VOM	5.5
CO	84.0

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, March 1998.

ii. Liquid Petroleum Gas Mode

Pollutant	Emission Factor (lb/1,000 gal)
PM	0.6
NO <sub>x</sub>	19
CO	3.2

7.4 Unit 4 Edible Rendering

7.4.1 Description

Edible rendering product is produced by transferring cooked meat and bone scraps to the Duske Bone Dryer. After drying, the dried product is collected in a cyclonic product collector where it is then transferred to the Edible Surge Bin located in the Edible Handling Building.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 4:	Duske Bone Dryer (JO-BD-1) Maximum heat input capacity: 30.0 mmBtu/hr	Venturi Scrubber with Wet Cyclone Demister
	Edible Surge Bin (JO-RE-1)	None
	Edible Rotex (JO-RE-2)	None
	Forsberg #1 & #2 Gravity Tables (JO-RE-5/6)	Cyclones
	Sweco Screen (JO-RE-7)	None

7.4.3 Applicability Provisions and Applicable Regulations

a. The "affected edible rendering unit" for the purpose of these unit-specific conditions, is a unit described in Conditions 7.4.1 and 7.4.2.

b. An affected edible rendering unit is subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.305, and 215.304 and the following exception: If no odor nuisance exists this limitation shall apply only to photochemically reactive material.

7.4.4 Non-Applicability of Regulations of Concern

- a. The provisions of 35 IAC Part 245 "Odors" do not apply for affected edible rendering units pursuant to 35 IAC 245.120(a).
- b. This permit is issued based on the affected edible rendering unit not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected edible rendering unit does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.4.5 Operational and Production Limits and Work Practices

- a. The bone process weight rate by edible dryer shall not exceed 8.79 tons/hr and 77,000 tons/year.
- b. Natural gas or liquid petroleum gas shall be the only fuels used by edible dryer.
- c. The Permittee shall use all reasonable actions in preventing the odors from affected edible rendering units.
- d. The Permittee shall follow good operating practices for the associated air pollution control devices, including periodic inspection, routine maintenance and repair of defects.

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, affected edible rendering units are subject to the following:

- a. PM Emissions (process emissions)

Equipment	PM Emissions	
	(Lb/hr)	(Ton/yr)
Duske Dryer	2.92	12.79
Edible Building Handling Room Air	3.07	13.45

These limitations were established in Operating Permit 00040054. These limits ensure that the construction and/or modification addressed in the aforementioned Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically Major Stationary Sources Construction and Modification and Prevention of Significant Deterioration of Air Quality Regulations (PSD) of 40 CFR 52.21 [T1].

b. Emissions from the products of fuel combustion

Pollutant	Emissions	
	Lb/hr	Ton/yr
NO <sub>x</sub>	2.94	12.88
CO	2.47	10.80
VOM	0.16	0.70
PM	0.22	0.98

The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions from the affected edible rendering dryer below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected edible rendering unit to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Material throughput (bone process weight), tons/mo and tons/year.
- b. Natural gas usage, mmscf/mo and mmscf/yr.
- c. Liquid petroleum gas usage, gal/mo and gal/yr.
- d. Hours of operation per month and per year
- e. Monthly and annual emissions calculated in accordance with Compliance Procedures from Condition 7.4.12.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected edible rendering unit with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

- a. Compliance with the limitations of Condition 7.4.3(b) and (c) is assured and achieved by the work-practices inherent in operation of the edible rendering unit.
- b. Compliance of the affected Duske Dryer with PM emission limitations of Condition 7.4.6(a) and VOM emissions shall be based on the recordkeeping requirements of Condition 7.4.9 and the following PM/PM<sub>10</sub> and VOM emission factors derived from the stack testing performed on this unit in 2001:

$$\text{PM/PM}_{10} = 2.0 \text{ lb/hr}$$

$$\text{VOM} = 0.52 \text{ lb/hr}$$

- c. Compliance of the affected bone dryer with emission limitations of Condition 7.4.6(b) shall be based on the recordkeeping requirements of Condition 7.4.9 and the following standard emission factors (AP-42) for fuel combustion sources:

i. Natural Gas Mode

Pollutant	Emission Factor (lb/mmscf)
NO <sub>x</sub>	100.0
VOM	5.5
CO	84.0

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, March 1998.

ii. Liquid Petroleum Gas Mode

Pollutant	Emission Factor (lb/1,000 gal)
PM	0.6
NO <sub>x</sub>	19
CO	3.2

These are the emission factors for uncontrolled Liquid Petroleum Gas combustion, Table 1.5-1, Volume I, September 1998.

7.5 Unit 5 Inedible Rendering

7.5.1 Description

Raw meat and bone is transferred to seven dry rendering cookers where they are steam cooked and dried to 50% of their original weight. For further liquid draining, the resulting beef crax (bone) material is passed through perc pans and two inedible presses. The solid material is then conveyed to the beef crax surge bin. Concentrate from the evaporator is dried in the steam drum dryer.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 5:	Dry Rendering Cookers (7 Units, JO-RC-1)	Cyclone Impingement Tank; Direct Contact Demister; Packed Bed Scrubber
	Steam Drum Dryer (JO-RC-2)	Packed Bed Scrubber
	Lo Pro Surge Bin Air Lock (JO-LPAL-1)	Baghouse
	Lo Pro Surge Bin (JO-IR-3)	Venturi Scrubber; Packed Bed Scrubber
	Beef Crax Surge Bin (JO-IR-1)	Venturi Scrubber; Packed Bed Scrubber
	Pork Crax Surge Bin (JO-IR-2)	Venturi Scrubber; Packed Bed Scrubber
	Inedible Hammermills (2 Units, JO-IR-4)	Venturi Scrubber; Packed Bed Scrubber
	Inedible Rotexes (2 units, JO-IR-5)	Venturi Scrubber; Dust Vacuum; Packed Bed Scrubber

7.5.3 Applicability Provisions and Applicable Regulations

- a. The "affected inedible rendering unit" for the purpose of these unit-specific conditions, is a unit described in Conditions 7.5.1 and 7.5.2.
- b. An affected inedible rendering unit is subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process

emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.305, and 215.304 and the following exception: If no odor nuisance exists this limitation shall apply only to photochemically reactive material.
- d. 35 IAC Part 245:
  - i. No person shall operate or use any device, machine, equipment, or other contrivance for the inedible rendering of animal or marine matter unless all gases, vapors and gas entrained effluents from these processes shall be controlled in such manner as to effectively abate any objectionable odor nuisance. In the event that the rendering processes of more than one company are contributing to the objectionable odor nuisance, abatement shall be deemed effective when the odor concentration from each process is not more than 120 odor units/cubic foot as determined by Mills adaptation of ASTM D-1391-57.
  - ii. An objectionable odor nuisance exists when a trained state inspector, upon the receipt of a complaint from one resident or property owner in the area affected shall determine that these odors cause a nuisance as outlined in Section 245.121.
  - iii. An objectionable odor nuisance exists:
    - A. On or adjacent to residential, recreational, institutional, retail sales, hotel or educational premises when odor is detectable in the ambient air after it is diluted with eight volumes of odor-free air as measured by the Scentometer;
    - B. On or adjacent to industrial premises when odor is detectable in the ambient air after it is diluted with twenty-four volumes of odor-free air as measured by the Scentometer;

- C. On or adjacent to premises other than those above when odor is detectable in the ambient air after it is diluted with sixteen volumes of odor-free air as measured by the Scentometer;
- D. When concurrent determinations made by three trained inspectors as outlined above in any given one hour period and at intervals of not less than fifteen minutes result in two positive determinations in each series of three determinations; and
- E. Provided that any quantitative odor level measurements taken to arrive at a determination that an objectionable odor nuisance exists shall be at or beyond the property line or at or near places where people live or work.

7.5.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected inedible rendering unit not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected inedible rendering unit does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.5.5 Operational and Production Limits and Work Practices

- a. The steam drum dryer hourly and annual process weight rate shall not respectively exceed 1,486 lb/hour and 6,509 ton/year.
- b. Total meat processing rate for cookers shall not exceed 85,998 tons/year.
- c. The Permittee shall use all reasonable actions in preventing the odors from affected inedible rendering units.
- d. The Permittee shall follow good operating practices for the associated air pollution control devices, including periodic inspection, routine maintenance and repair of defects.

7.5.6 Emission Limitations

None

7.5.7 Testing Requirements

None

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected inedible rendering units to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Material throughput (finish crax output) for each individual unit group of affected inedible rendering operations, tons/mo and tons/year.
- b. Monthly and annual emissions calculated in accordance with Compliance Procedures from Condition 7.5.12.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected inedible rendering unit with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

- a. Compliance with the limitations of Condition 7.5.3(b), (c) and (d) is assured and achieved by the work-practices inherent in operation of the inedible rendering unit.

- b. Compliance of the affected inedible rendering unit with PM/PM<sub>10</sub> and VOM emission limitations of Condition 7.5.6 shall be based on the recordkeeping requirements of Condition 7.5.9 and the following uncontrolled emission factors that either derived from the stack tests performed on similar inedible rendering units in Dakota City IBP plant in 1998 and 1999 or by using original or modified standard emission factors from AP-42:

Emission Unit	Emission Factor, PM/PM <sub>10</sub> lb/ton Crax Processed	Emission Factor, VOM, lb/ton Crax Processed
Cooker	0.15*	0.19*
Dryer	0.30**	---
Surge Bin	0.031***	---
Hammermill	1.34***	---
Rotex	0.75***	---

\* Stack Test

\*\* Stack Test, modified emission factor

\*\*\* AP-42, 9.9.1, modified

Emissions, Ton = Emission Factor x Crax Processed,  
ton x Control Device Efficiency, %/100

7.6 Unit 6 Storage Silos

7.6.1 Description

Silos serve to store material and products before they are loaded out for shipping, either via truck and railway. The Blood Silo receives dried blood product from Blood Rendering. This product is pneumatically blown to the Blood Rail Load Out Air Lock for rail shipment. Inedible Silos store 50% Meat and Bone Meal or unblended Lo Pro. The meal can either be transferred out by rail or to the Truck Load Out Air Lock for truck shipping.

Two lime silos located at the Joslin facility. One of these is used for Tannery operations and another is used in the Wastewater Treatment Plant.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 6:	Three (3) Inedible Rendering Silos (JO-SILO-1, 2, 3)	Baghouse (JO-SBH-1)
	One (1) Blood Rendering Silo (JO-SILO-6)	Baghouse (JO-BBH-1)
	Two (2) Lime Silos (JO-WWTP-LIME; JO-WT-LIME)	Two Baghouse

7.6.3 Applicability Provisions and Applicable Regulations

- a. The "affected storage silo" for the purpose of these unit-specific conditions, is a storage silo described in Conditions 7.6.1 and 7.6.2.
- b. An affected storage silo is subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

7.6.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected storage silo not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected storage silo does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.6.5 Operational and Production Limits and Work Practices

- a. The Permittee shall follow good operating practices for the associated air pollution control devices, including periodic inspection, routine maintenance and repair of defects.
- b. The Permittee shall operate, maintain, and replace the fabric filters in a manner that assures compliance with the conditions of this Section.

7.6.6 Emission Limitations

None

7.6.7 Testing Requirements

None

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected storage silos to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Total material throughput, tons/mo and tons/year.
- b. Lime throughput, tons/mo and tons/yr.
- c. Monthly and annual emissions of PM/PM<sub>10</sub> calculated in accordance with Compliance Procedures from Condition 7.6.12.

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected storage silos with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.6.12 Compliance Procedures

a. Compliance with the particulate matter limitations of Condition 7.6.3(b) is assured and achieved by the work-practices inherent in operation of the affected storage silos.

b. Compliance of the affected storage silos with PM emission limitations of Condition 5.5.1 shall be based on the recordkeeping requirements of Condition 7.6.9 and the use of the following PM/PM<sub>10</sub> standard emission factors from 9.9.1 of AP-42:

All Inedible Rendering Silos - 0.017 lb/ton.

Blood Rendering Silo - 0.034 lb/ton (modified factor)

Emissions (tons) = product throughput (tons) x emission factor (lb/ton) x control efficiency (%) / 100

c. Compliance of affected lime silos with PM emission limitations of Condition 5.5.1 shall be based on the recordkeeping requirements of Condition 7.6.9 and the use of the PM/PM<sub>10</sub> standard uncontrolled emission factor from AP-42 equal to 0.61 lb/ton.

Emissions (tons) = lime throughput (tons) x emission factor (lb/ton) x control efficiency (%) / 100

7.7 Unit 7 Truck and Rail Loading

7.7.1 Description

Several products - 50% Meat and Bone Meal with or without Lo Pro, Gel Bone, and Small Bone - produced at the Joslin facility can be loaded out by either truck or rail. For truck rail load out, these materials pass first from their respective silos to the Truck Load Out Air Lock. The actual truck loading of these rendered products takes place inside a Truck Load Out room where the doors can be closed during loading. The rail loading is performed in the Rail Load Out area, which is located outside of the building and does not employ any control device.

7.7.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 7:	Truck Load Out Air Lock (JO-TAL-1)	Baghouse
	Truck Load Out (JO-TRUCK-1)	Packed Bed Scrubber
	Rail Load Out (JO-RAIL-1)	None
	Blood Rail Load Out (JO-BBH-1)	Baghouse

7.7.3 Applicability Provisions and Applicable Regulations

- a. The "affected truck and rail loading unit" for the purpose of these unit-specific conditions, is a unit described in Conditions 7.7.1 and 7.7.2.
- b. An affected truck and rail loading unit is subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

7.7.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected truck and rail loading unit not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected truck and rail loading unit does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.7.5 Operational and Production Limits and Work Practices

- a. The Permittee shall follow good operating practices for the associated air pollution control devices, including periodic inspection, routine maintenance and repair of defects.
- b. The Permittee shall operate, maintain, and replace the fabric filters in a manner that assures compliance with the conditions of this Section.

7.7.6 Emission Limitations

None

7.7.7 Testing Requirements

None

7.7.8 Monitoring Requirements

None

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected truck and rail loading unit to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Total material throughput, tons/mo and tons/year.
- b. Monthly and annual emissions of PM/PM<sub>10</sub> calculated in accordance with Compliance Procedures from Condition 7.7.12.

7.7.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected truck and rail loading unit with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

- a. Compliance with the limitations of Condition 7.7.3(b) is assured and achieved by the work-practices inherent in operation of affected truck and rail loading unit.
- b. Compliance of the affected truck and rail loading unit with PM/PM<sub>10</sub> emission limitations of Condition 5.5.1 shall be based on the recordkeeping requirements of Condition 7.7.9 and the following uncontrolled original or modified standard emission factors from AP-42:

Emission Unit	Emission Factor, PM/PM <sub>10</sub> lb/ton Material Processed	AP-42, Table 9.9.1-1
Transfer of Edible Material	0.031	Modified
Edible/Inedible Truck Loading	0.043	Modified
Edible/Inedible Rail Loading	0.014	Modified
Transfer of Blood Material	0.061	Original
Blood Rail Loading	0.027	Original

Emissions (tons) = product throughput (tons) x emission factor (lb/ton) x control efficiency (%) / 100

7.8 Unit 8 Hide Splitter (Tannery)

7.8.1 Description

The Hide Splitter in the Tannery serves to split each hide into two thinner layers. The cutting is performed by a blade, which runs against cutting stones.

7.8.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 8:	Hide Splitter (JO-HS-1)	Cyclone

7.8.3 Applicability Provisions and Applicable Regulations

a. The "affected hide splitter" for the purpose of these unit-specific conditions, is a unit described in Conditions 7.8.1 and 7.8.2.

b. An affected hide splitter is subject to 35 IAC 212.321(b) (1), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (See also Attachment 1) [35 IAC 212.321(a)].

7.8.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected hide splitter not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected hide splitter does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.8.5 Operational and Production Limits and Work Practices

The Permittee shall follow good operating practices for the associated air pollution control devices, including periodic inspection, routine maintenance and repair of defects.

7.8.6 Emission Limitations

None

7.8.7 Testing Requirements

None

7.8.8 Monitoring Requirements

None

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected hide splitter to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Hours of operation per month and per year
- b. Flow rate of cyclone, scfm
- c. Monthly and annual emissions of PM/PM<sub>10</sub> calculated in accordance with Compliance Procedures from Condition 7.8.12.

7.8.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected hide splitter with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

- a. Compliance with the limitations of Condition 7.8.3(b) is assured and achieved by the work-practices inherent in operation of affected hide splitter.

- b. Compliance of the affected hide splitter with PM/PM<sub>10</sub> emission limitations of Condition 5.5.1 shall be based on the recordkeeping requirements of Condition 7.8.9, emission factor equal to 0.1 grains/scf and the following equation:

$$\begin{aligned} \text{PM/PM}_{10} \text{ Emissions, ton/yr} &= \text{emission factor (gr/scf)} \\ &\times \text{air flow rate (scfm)} \times 60 \text{ (min/hr)} \times 1/7,000 \\ &\text{(lb/gr)} \times \text{hours of operation (hr/yr)} \times 1/2000 \\ &\text{(ton/lb)} \times \text{control efficiency, \%}/100, \end{aligned}$$

7.9 Unit 9 Wastewater Treatment Plant

7.9.1 Description

The source has a wastewater treatment plant to treat wastewater generated at the beef processing complex. The wastewater treatment plant contains three covered anaerobic lagoons and two covered Flow Equalization Basins (FEB) connected to an aeration basin. The three anaerobic lagoons are equipped with covers and vent to a common scrubber and flare control system. An air from FEB is diffused into the Aeration Basin via fine bubble diffusers.

7.9.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 9:	Three Anaerobic Wastewater Lagoons Each with a Cover	Packed Column Scrubber and BioGas Flare for Covered Lagoons
	Two Covered Equalization Basins Ducted to an Aeration Basin	None

7.9.3 Applicability Provisions and Applicable Regulations

- a. The "affected wastewater treatment plant" for the purpose of these unit-specific conditions, is a unit described in Conditions 7.9.1 and 7.9.2.
- b. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm [35 IAC 214.301].
- c. Control system operated in conjunction of covered lagoons shall be capable of reducing organic material emissions to at least 85 percent the uncontrolled organic material that would be otherwise emitted to the atmosphere, pursuant to 35 IAC 215.302.
- d. For uncontrolled emissions, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.305, and 215.304 and the following exception: If no odor nuisance exists this limitation shall apply only to photochemically reactive material.

7.9.4 Non-Applicability of Regulations of Concern

None

7.9.5 Operational and Production Limits and Work Practices

- a. At all times, the Permittee shall, to the extent practicable, maintain and operate the lagoons, including associated air pollution capture and control equipment, in accordance with written operating procedures that provide for good air pollution control practice for minimizing emissions. At a minimum, these practices shall include:
  - i. The following provisions for operation of the scrubber:
    - A. Procedures for addition of scrubbant to the scrubber, including target rate of scrubbant addition.
    - B. Acceptable ranges of scrubber operating parameters.
  - ii. The following provisions for operation of the flare:
    - A. The flare shall be operated with a flame present at all times.
    - B. The presence of a flare pilot flame shall be monitored using a thermocouple or other comparable device to detect the presence of a flame.
    - C. If the pilot flame goes out, the flow of off-gases to the flare shall be discontinued until the pilot flame is restored.
  - iii. Provisions for periodic inspection of the capture system scrubber and flare.
- b. Equalization basins shall be covered any time during normal operations. These covers are used for controlling odors generated by these basins.

7.9.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, affected wastewater treatment plant is subject to the following:

- a. Total combined emissions from the affected lagoons shall not exceed the following limits:

<u>Pollutant</u>	<u>Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
NO <sub>x</sub>	3.8	18.8
CO	11.1	55.7
VOM	1.5	7.4
SO <sub>2</sub>	3.3	16.6
H <sub>2</sub> S	0.1	0.2

These limitations were established in Construction Permit 00040053. These limits ensure that the construction and/or modification addressed in the aforementioned Construction Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically Major Stationary Sources Construction and Modification and Prevention of Significant Deterioration of Air Quality Regulations (PSD) of 40 CFR 52.21 [T1].

- b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

7.9.7 Testing Requirements

Testing of H<sub>2</sub>S emissions from the scrubber/flare system was performed on October 23/24, 2001, pursuant to requirements of Construction Permit 00040053 and emission factor derived from this test is used further in Compliance Procedures of Condition 7.9.12.

7.9.8 Monitoring Requirements

None

7.9.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected wastewater treatment plant to demonstrate compliance with Condition 5.5.1 and Section 7 of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain a copy of the written operating procedures, required by Condition 7.9.5, which procedures shall be reviewed at least annually and revised as needed.
- b. The Permittee shall maintain an operating log for the control system, that at minimum, identifies periods of time when the system is not in operation, maintenance and repair activities, actual scrubbant

addition rates, and changes to the nature of the additions, i.e., different solution purchased or change in the concentration to which it is being prepared.

- c. The Permittee shall maintain records of the following items for the affected lagoons:
  - i. Usage of scrubbing agent (gallons/month);
  - ii. Biogas flow rate, scfm;
  - iii. Hours of operation for the scrubber and flare (hours/month and hours/year); and
  - iv. NO<sub>x</sub>, CO, PM, SO<sub>2</sub>, VOM and H<sub>2</sub>S emissions (tons/month and tons/year).
- d. Records of emissions calculated based on the Compliance Procedures of Condition 7.9.12.

#### 7.9.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected wastewater treatment plant with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

#### 7.9.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

#### 7.9.12 Compliance Procedures

- a. Compliance with the limitations of Condition 7.9.3(b) is assured and achieved by the work-practices inherent in operation of affected wastewater treatment plant.

- b. Compliance with the limitations of Condition 7.9.3(c) is assured and achieved by the work-practices inherent in operation of scrubber/flare control system.
- c. Compliance of lagoons with emission limitations of Conditions 5.5.1 and 7.9.6 shall be based on the recordkeeping requirements of Condition 7.9.9 and the following equation:

H<sub>2</sub>S Emissions:

$$E = 0.03 \text{ (lb/hr)*}$$

\* As determined from the stack test of Condition 9.9.7 and based on average H<sub>2</sub>S emission from the scrubber outlet equal to 1.45 lb/hr and 98% destruction efficiency of flare.

- d. Emissions of NO<sub>x</sub>, CO, VOM, and SO<sub>2</sub> shall be calculated using the following emission factors and formulas:

- i. VOM Emissions:

$$E = (\text{Biogas Flow Rate, scf/hr}) \times (\text{Partial Vapor Density of VOC in the Biogas, lb/scf}) \times [1 - (\text{Control Efficiency of Flare}/100)]$$

- ii. NO<sub>x</sub> Emissions:

$$E_1 = (0.0641 \text{ lb NO}_x/\text{mmBtu}) \times (23.12 \text{ mmBtu/hr})$$

$$E_2 = (\text{Biogas Flow Rate, scf/hr}) \times (\text{Partial Vapor Density of NH}_3 \text{ in the Biogas, lb/scf}) \times (14 \text{ lb N}/17 \text{ lb NH}_3) \times (46 \text{ lb NO}_2/14 \text{ lb N})$$

$$E_T = E_1 + E_2$$

- iii. CO Emissions:

$$E = (0.5496 \text{ lb CO/mmBtu}) \times (23.12 \text{ mmBtu/hr})$$

- iv. SO<sub>2</sub> Emissions:

$$E = (\text{Biogas Flow Rate, scf/hr}) \times (\text{Partial Vapor Density of SO}_2 \text{ in the Biogas, lb/scf}) \times [1 - (\text{Control Efficiency of Scrubber}/100)] \times (1 \text{ lb mole H}_2\text{S}/34 \text{ lb H}_2\text{S}) \times (1 \text{ lb mole SO}_2/1 \text{ lb mole H}_2\text{S}) \times (64 \text{ lb SO}_2/1 \text{ lb mole SO}_2)$$

- e. Emissions of H<sub>2</sub>S from flow equalization basins shall be calculated based on the emission factor equal to 8.6 E-5 lb/hr (derived from operation of similar operations at Dakota City facility).

7.10 Unit 10 Gasoline Storage Tank

7.10.1 Description

Gasoline storage tank is associated with gasoline non-retail dispensing operations at this location.

7.10.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 7:	Gasoline Storage Tank, 560 Gallons Capacity	Submerged Loading Pipe

7.10.3 Applicability Provisions and Applicable Regulations

- a. An "affected gasoline storage tank" for the purpose of these unit specific conditions is used for non-retail dispensing operations at this location.
- b. The affected gasoline storage tank is subject to 35 IAC 215.122(b) and 215.583(a) (1). These requirements are discussed further in Condition 7.10.5.

7.10.4 Non-Applicability of Regulations of Concern

The affected gasoline storage tank is exempted from applicability of 35 IAC 215.583(a) (2) because the tank is located outside the counties designated in 35 IAC 215.583(b) (4).

7.10.5 Operational and Production Limits and Work Practices

- a. No person shall cause or allow the loading of any organic material in any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe [35 IAC 215.122(b)].
- b. No person shall cause or allow the transfer of gasoline from any delivery vessel into the stationary storage tank at a gasoline dispensing operations unless the tank is equipped with a submerged loading pipe [35 IAC 215.583(a) (1)].

7.10.6 Emission Limitations

In addition to Condition 5.5.1, the affected gasoline storage tank is subject to the following:

None

7.10.7 Testing Requirements

None

7.10.8 Monitoring Requirements

None

7.10.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected gasoline storage tank to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Monthly and annual gasoline throughput (gallons/month and gallons/year).
- b. Monthly and annual VOM emissions calculated based on the compliance procedure in Condition 7.10.12.

7.10.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the emission limitations as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

None

7.10.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.10.12 Compliance Procedures

To determine compliance with Condition 5.5.1, VOM emissions from the storage tank shall be calculated based in the current version of the TANK program.

7.11 Unit 11 Fugitive Emissions

7.11.1 Description

A certain amount of dust is generated due to vehicle traffic and unpaved roads, shoulders or other surfaces located on site. The Joslin facility has approximately 0.45 miles of paved roads and 0.69 miles of unpaved roads in and surrounding the rendering plant and water treatment plant.

7.11.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 11:	Paved and Unpaved Roads	None

7.11.3 Applicability Provisions and Applicable Regulations

- a. The "affected fugitive emission sources" for the purpose of these unit-specific conditions, are the unpaved and paved roadways as described in Conditions 7.11.1 and 7.11.2 above.
- b. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

7.11.4 Non-Applicability of Regulations of Concern

Affected fugitive emission sources are not subject to requirements of 35 IAC 212.304 through 212.312 pursuant to certain geographical criteria established in 35 IAC 212.302.

7.11.5 Operational and Production Limits and Work Practices

N/A

7.11.6 Emission Limitations

None

7.11.7 Testing Requirements

None

7.11.8 Monitoring Requirements

None

#### 7.11.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected fugitive emission sources to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Vehicle miles traveled per year; and
- b. Emissions of regulated air pollutants as calculated in accordance with compliance procedures in Condition 7.11.12.

#### 7.11.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the emission limitations as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

If there is an exceedance of the emission limitations of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

#### 7.11.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

#### 7.11.12 Compliance Procedures

- a. Emission calculations are based on the recordkeeping requirements in Condition 7.11.9 and the following emission factors and formulas.

##### Unpaved Roadways

$$E = k (5.9) (s/12) (S/30) (W/3)^{0.7} (w/4)^{0.5} (365 - p/365)$$

Where

E = Emission factor (lb/VMT)

K = Particle size multiplier (0.8 for TSP, 0.36 for PM<sub>10</sub>)

s = Silt content of road surface material (%)

- S = Mean vehicle speed (mph)  
W = Mean vehicle weight (tons)  
w = Mean number of wheels  
p = Number of days with at least 0.01 in. of precipitation per year

Industrial Paved Roadways

$$E = k (sL/2)^{0.65} (W/3)^{1.5}$$

Where

- E = Emission factor (lb/VMT)  
k = Particle size multiplier (0.82 for TSP, 0.016 for PM<sub>10</sub>)  
sL = Road silt loading (g/m<sup>2</sup>)  
W = Average weight of the vehicles traveling on the road in tons

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after June 12, 2003 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

### 8.3 Emissions Trading Programs

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

#### 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

#### 8.6 Reporting Requirements

##### 8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

#### 8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

#### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

#### 8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
  - i. Illinois EPA - Air Compliance Section  
  
Illinois Environmental Protection Agency  
Bureau of Air  
Compliance Section (MC 40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
  - ii. Illinois EPA - Air Regional Field Office  
  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614
  - iii. Illinois EPA - Air Permit Section  
  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority 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 CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

#### 9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

#### 9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

#### 9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

#### 9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

### 9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

#### 9.5 Liability

##### 9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

##### 9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

##### 9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

##### 9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

#### 9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7) (o) (iv) of the Act].

### 9.6 Recordkeeping

#### 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

#### 9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12) (b) (iv) of the Act].

#### 9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7) (e) (ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

### 9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

### 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7) (p) (v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be

submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this 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, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

#### 9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

#### 9.10 Defense to Enforcement Actions

##### 9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

##### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
  - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
  - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
  - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

#### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7) (o) (iii) of the Act].

##### 9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15) (a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

#### 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15) (b) of the Act.

#### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7) (o) (v) of the Act].

#### 9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7) (i) of the Act].

#### 9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- b. The emissions of particulate matter into the atmosphere in any one hour period from the affected coating lines shall not exceed the allowable emission rates specified in the following equation:

$$E = A(P)^B$$

Where:

P = Process weight rate;  
E = Allowable emission rate; and,

- i. For process weight rates of 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- ii. For process weight rates in excess of 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

- c. Limits for Process Emission Units for which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321(c)]:

<u>Metric</u>		<u>English</u>	
<u>P</u>	<u>E</u>	<u>P</u>	<u>E</u>
<u>Mg/hr</u>	<u>kg/hr</u>	<u>T/hr</u>	<u>lb/hr</u>
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

10.2 Attachment 2 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date Signed: \_\_\_\_\_

### 10.3 Attachment 3 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
  - Corrects typographical errors;
  - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - Requires more frequent monitoring or reporting by the Permittee;
  - Allows for a change in ownership or operational control of the source where 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 Permittees has been submitted to the Illinois EPA;
  - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
  - Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.
2. Minor Permit Modification
  - Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
  - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA; and
- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

### 3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency  
 Division Of Air Pollution Control -- Permit Section  
 P.O. Box 19506  
 Springfield, Illinois 62794-9506

<b>Application For Construction Permit (For CAAPP Sources Only)</b>	<b>For Illinois EPA use only</b>
	I.D. number:
	Permit number:
Date received:	

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. I.D. number:

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

<b>Summary Of Application Contents</b>	
24. Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25. Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26. Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27. Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28. Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29. If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

<b>Signature Block</b>	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature:	
BY:	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	/ _____ / _____
TYPED OR PRINTED NAME OF SIGNATORY	DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

## 10.5 Attachment 5 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance certification for the source. For this purpose, the Illinois EPA will accept a copy of the most recent form 401-CAAPP, ANNUAL COMPLIANCE CERTIFICATION submitted to the Illinois EPA.
3. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
4. Information addressing any outstanding transfer agreement pursuant to the ERMS.
5.
  - a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.
  - b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506

AB:psj