



- b. The Permittee shall maintain records of the sulfur content of each fuel delivery based on fuel supplier verification, pursuant to 40 CFR 60.44c(h).
  - c. When firing fuel oil, the opacity from the 60.41 mmBtu/hour boiler shall not exceed 20% during normal operation, except for one 6 minute period per hour of not more than 27%, pursuant to 40 CFR 60.43c.
  - d. At all times the Permittee shall maintain and operate the boilers, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emission, pursuant to 40 CFR 60.11(d).
- 3a. Pursuant to 35 Ill. Adm. Code 212.123(a), 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 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 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 meter (1000 foot) 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.
  - c. Pursuant to 35 Ill. Adm. Code 212.301, 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.
  - d. Pursuant to 35 Ill. Adm. Code 212.321(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 which, 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 35 Ill. Adm. Code 212.321(c).
4. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.
5. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception:

If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K shall apply only to photochemically reactive material.

- 6a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
  - b. The singers shall only be operated with natural gas as the fuel. The use of any other fuel in the singers requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.
  - c. At the above location, the Permittee shall not keep, store, or utilize a fuel with a sulfur content greater than 0.3 weight percent.
  - d. The Illinois EPA shall be allowed to sample all fuels stored at the source.
- 7a. Emissions and operation of fuel combustion in the boilers shall not exceed the following limits:

<u>Fuel Type</u>	<u>Consumption</u>		<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
	<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>		<u>Factor</u>	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Natural Gas	58	580	NO <sub>x</sub>	100	5,800	29.00
			CO	84	4,872	24.36
			PM	7.6	441	2.20
			VOM	5.5	319	1.60
			SO <sub>2</sub>	0.6	35	0.17

These limits are based on standard AP-42 emission factors and information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Emissions and operation of fuel combustion in the boilers shall not exceed the following limits:

<u>Fuel Type</u>	<u>Consumption</u>		<u>Pollutant</u>	<u>Emission</u>	<u>Emissions</u>	
	<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>		<u>Factor</u>	<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Fuel Oil	325,000	1,6000,000	SO <sub>2</sub>	42.6	13,845	34.08
			NO <sub>x</sub>	20.0	6,500	16
			CO	5.0	1,625	4
			PM	2.0	650	1.6
			VOM	0.252	81.9	0.20

These limits are based on standard AP-42 emission factors, a maximum sulfur content of 0.3% and information provided in the permit

application. Compliance with annual limits shall be determined from a running total of 12 months of data.

- c. Emissions and operation of 3 smokehouses shall not exceed the following limits:

<u>Product</u>	<u>Throughput</u>		<u>Pollutant</u>	<u>Emission Factor</u> (Lb/T of Wood)	<u>Emissions</u>	
	(T/Mo)	(T/Yr)			(Lb/Mo)	(T/Yr)
Wood	65	700	PM	54	3,510	18.9
			VOM	44	2,860	15.4

These limits are based on standard AP-42 emission factors and information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

- d. Emissions and operation of miscellaneous processes shall not exceed the following limits:

<u>Process</u>	<u>Output</u>		<u>PM</u> <u>Emission</u> <u>Factor</u> (Lbs/Ton)	<u>Emissions</u>	
	(Tons/Mo)	(Tons/Yr)		(Lbs/Mo)	(Tons/Yr)
Edible Rendering	1,640	16,400	0.4	656	3.28
Inedible Rendering	3,060	30,600	0.2	612	3.06

These limits are based on standard AP-42 emission factors and information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

- e. This permit is issued based on negligible emissions of volatile organic material from edible rendering system, inedible rendering system, 11 vacuum pumps, Chad sanitizing system, hog hair hydrolizer, and wastewater pretreatment system. For this purpose emissions each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- f. This permit is issued based on negligible emissions of particulate matter (PM) from 2 hog singers, hammermill with dust collection, Chad sanitizing system, and 11 vacuum pumps. For this purpose emissions each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- g. Emissions and operation of the two hog singers combined shall not exceed the following limits:
  - i. Natural Gas Usage: 23.21 mmscf/month, 232.05 mmscf/year.

ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(Lbs/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Carbon Monoxide (CO)	84	0.98	9.75
Nitrogen Oxides (NO <sub>x</sub> )	100	1.16	11.60
Particulate Matter (PM)	7.6	0.09	0.88
Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.01	0.07
Volatile Organic Material (VOM)	5.5	0.06	0.64

These limits are based on the maximum combined firing rate of the two singers (27.02 mmBtu/hour, the maximum natural gas usage a heat content of 1,020 Btu/scf for natural gas, standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998), and 8,760 hours/year of operation.

- h. Compliance with the annual limits of this permit 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).
- 8. This permit is issued based on the Potential to Emit (PTE) for Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the source being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program (CAAPP) Permit.
- 9a. Pursuant to 35 Ill Adm. Code Section 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
  - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
  - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request

of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

- b. Testing required by Condition 10 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 10. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 11. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 12a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. Operating and maintenance logs for each control system, including: maintenance activities, with date and description of inspections, repair actions, and equipment or filter bag replacements, etc.;
  - ii. Natural gas usage (mmscf/month and mmscf/year);
  - iii. Fuel oil usage and sulfur content (gallons/month and gallons/year);
  - iv. Wood consumed in the smokehouses (tons/month and tons/year);
  - v. Lard production from edible rendering (tons/month and tons/year);
  - vi. Inedible rendering product (tons/month and tons/year); and
  - vii. Monthly and annual CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the source with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

13. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- 14a. If there is an exceedance of or a deviation from the requirements 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 or deviation. 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 deviation and efforts to reduce emissions and future occurrences.
- b. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P. O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614

It should be noted that this permit has been revised so as to include the operation of the equipment described in Construction Permit 10110028.

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

Edwin C. Bakowski, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

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

ECB:MJD:psj

cc: Illinois EPA, FOS Region 2  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from pork processing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The plant is demonstrating compliance through the following limitations: fuel combustion usage (580 mmscf/year of natural gas and 1,600,000 gallons/year of fuel oil), 700 tons/year of wood consumed by the smokehouses, 30,600 tons/year of inedible rendering, and 16,400 tons/year of edible rendering. The resulting maximum emissions are below the levels, e.g., 100 tons/year of sulfur dioxide (SO<sub>2</sub>) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)				
	<u>NO<sub>x</sub></u>	<u>CO</u>	<u>SO<sub>2</sub></u>	<u>VOM</u>	<u>PM</u>
3 Boilers					
Natural Gas	29.00	24.36	0.17	1.60	2.20
#2 Oil	16.00	4.00	34.08	0.20	1.60
3 Smokehouses				15.40	18.90
2 Hog Singer Systems	11.60	9.75	0.07	0.64	1.76
Hog Hair Hydrolyzed				0.44	
Edible Rendering Enclosed System				0.44	3.28
Inedible Rendering System					
Controlled by Cyclone				0.44	3.06
Wastewater Pretreatment System				0.44	
Chad Sanitizing System with					
Mist Eliminators				0.44	0.44
11 Vacuum Pumps				4.84	4.84
Totals	<u>55.60</u>	<u>38.11</u>	<u>34.32</u>	<u>24.88</u>	<u>36.08</u>

MJD:psj