



Illinois Environmental Protection Agency

Grain Handling and Grain Drying Data and Information

Illinois Environmental Protection Agency
Bureau of Air – Permit Section (MC 11)
2520 West Iles Ave
P.O. Box 19276
Springfield, IL 62794-9276

Date Form Received

Source Information

Source Name: _____
Source ID Number: _____
CAAPP Permit Number: _____
Environmental Contact Name: _____
Environmental Contact Email: _____
Environmental Contact Phone Number: _____

General Information

Annual Grain Throughput (Tons/Year): _____
Annual Grain Throughput (Bushels/Year): _____

Maximum Grain Drying Capacity (Bushels/Hour): _____
Maximum Grain Drying Capacity (Bushels/Year): _____

Total Storage Capacity of the Facility (Bushels/Year): _____

If requesting an exemption pursuant to 35 IAC 212.461(c), explain:

The Illinois EPA is authorized to require, and you must disclose, the requested information on this form pursuant to the Environmental Protection Act (“Act”), 415 ILCS 5/1 et seq., and its implementing regulations. This information shall be provided using either this form or in an alternative manner at your discretion. Failure to disclose the information may result in an incomplete application and other penalties as provided for in the Act, 415 ILCS 5/42-45. Intentional falsification of the information in this form may result in significant criminal and civil penalties as provided by law.

Provide the name and designation of air pollution control equipment for this facility, if applicable (form 260-CAAPP and the appropriate 260-CAAPP addendum form must be completed for each item of air pollution control equipment):

Provide any limitations on source operation affecting emissions or any work practice standards (e.g., only one unit is operated at a time):

Operating Information

To Induce Draft in the Main Dump Pit,

Rated Airflow (scfm): _____

Against Static Pressure of the Fan (inches of water): _____

Effective Grate Area of the Major Dump Pit Area (ft²): _____

Describe the means or devices employed to assure compliance with 35 IAC 212.462(b)(1)(D). Attach and label as Exhibit 236-1.

Describe any other equipment, technique, system or equivalent thereof, used to achieve a particulate matter emission reduction equal to that which could be achieved by compliance to 35 IAC 212.462(b)(1)(A). Attach and label as Exhibit 236-2.

Describe the means or devices used to capture particulate matter emissions generated during cleaning and separating operations that prevent the release of visible particulate matter emissions directly into the atmosphere:

Are the internal transfer areas enclosed so as to prohibit the release of visible particulate matter emissions directly into the atmosphere? Yes No

Does the truck and hopper car loading system employ socks, sleeves, or their equivalent which extend at least 6 inches below the sides of the receiving vehicle; or if choke loading is employed, is the discharge point no more than 12 inches above the sides of the receiving vehicle? Yes No

Describe the means or devices used to prevent emissions of particulate matter into the atmosphere from any box car loading operations:

Dryer Operations

For column dryers, state the largest effective circular diameter of the transverse perforations in the external sheeting (inches): _____

For rack dryers, state the maximum opening of the collection screen using the U.S. sieve series (mesh): _____

Do these collection screens have self-cleaning mechanisms? Yes No

If the collection screens have self-cleaning mechanisms, is the exhaust gas of the self-cleaning mechanism exhausted through pollution control equipment? Yes No

If the exhaust gas of the self-cleaning mechanism is exhausted through pollution control equipment, complete form 260-CAAPP.

For other types of dryers, describe the means by which the particulate matter emissions are controlled so as to provide the same degree of control required for rack dryers:

Emission Information

Provide the controlled emissions (e.g. the emissions that would result after all control and capture efficiencies are accounted for).

Name of Regulated Air Pollutant	Example: Particulate Matter			
Typical Emission Rate (lbs/hr)	4.00			
Maximum Emission Rate (lbs/hr)	5.00			
Typical Emission Rate (ton/year)	14.4			
Maximum Emission Rate (ton/year)	21.9			
Typical Emission Rate Other Terms (ppm, gr/dscf, etc.) _____	0.24 gr/dscf			
Maximum Emission Rate Other Terms (ppm, gr/dscf, etc.) _____	0.3 gr/dscf			
Applicable Rule	35 IAC 212.321			

Hazardous Air Pollutant Emission Information

Provide the controlled HAP emissions (e.g. the emissions that would result after all control and capture efficacies are accounted for).

Name of HAP Emitted	Example: Benzene			
Chemical Abstract Service (CAS) Number	71432			
Typical Emission Rate (lbs/hr)	8.0			
Maximum Emission Rate (lbs/hr)	10.0			
Typical Emission Rate (ton/year)	0.8			
Maximum Emission Rate (ton/year):	1.2			
Typical Emission Rate Other Terms (ppm, gr/dscf, etc.) _____				
Maximum Emission Rate Other Terms (ppm, gr/dscf, etc.) _____				
Applicable Rule	40 CFR 61.302(b), (d)			

Individual Emission Unit Operating Information

The remainder of this form must be completed for each individual emission unit in the grain handling and/or drying facility. A single form may be used for multiple similar emission units where the information contained on the remainder of this form is identical between the emission units. Attach additional portions as needed.

Name of Emission Unit: _____

Flow Diagram Designation of Emission Unit: _____

	Maximum	Typical
Emission Unit Operating Rate (bushels/hour)		
Control Equipment Efficiency (percentage from 260-CAAPP)		

Operating Hours	Maximum	Typical
Hours Per Day		
Hours Per Week		
Weeks Per Year		

Throughput	Dec-Feb(%)	Mar-May(%)	Jun-Aug(%)	Sep-Nov(%)
Annual Throughput				

Emission Calculations

$$\begin{aligned}
 \text{Emissions} = & (\text{Emission Factor}) \times (\text{Operating Rate}) \times \left(\frac{\text{Hours}}{\text{Year}}\right) \times (\text{Ratio Processed}) \\
 & \times \left(1 - \left(\frac{\text{Control Efficiency}}{100}\right)\right) \times \left(0.03 \frac{\text{Tons}}{\text{Bushel}}\right)
 \end{aligned}$$

Where:

Ratio Processed = The Ratio of Grain Processed to Grain Shipped Or Received

Total Particulate Emissions:

PM Emission Factor: _____

Maximum Operating Rate: _____

Typical Operating Rate: _____

Maximum Operating Hours Per Year: _____

Typical Operating Hours Per Year: _____

Maximum Ratio Processed: _____

Typical Ratio Processed: _____

Control Efficiency (%): _____

Maximum PM Emissions: _____

Typical PM Emissions: _____

PM₁₀ Emissions:

PM₁₀ Emission Factor: _____

Maximum Operating Rate: _____

Typical Operating Rate: _____

Maximum Operating Hours Per Year: _____

Typical Operating Hours Per Year: _____

Maximum Ratio Processed: _____

Typical Ratio Processed: _____

Control Efficiency (%): _____

Maximum PM₁₀ Emissions: _____

Typical PM₁₀ Emissions: _____

Testing, Monitoring, Recordkeeping, and Reporting

List the parameters that relate to air emissions for which records are being maintained to determine fees, rule applicability or compliance:

Operating Parameter to be Monitored (e.g. flow rate)			
Method of Measurement			
Unit of Measurement			
The Monitoring Frequency			
Description of the Location of Each Monitor (e.g., in stack monitor 3 feet from exit)			
Verification Procedures to Confirm the Operational Status of the Monitoring			
Method of Recordkeeping (e.g. data logger, manual readings)			

If each monitor is not operated at all times the equipment is in operation, explain:

Provide information on the most recent tests, if any. If additional space is needed, attach and label as exhibit 236-3:

Test Date:	Test Method:	Testing Company:	Operating Conditions:	Summary of Results:

Describe all reporting requirements and provide the title and frequency of report submittals to the Agency: