



- c. The dry corn mill is subject to 35 IAC 212.301, which provides that the emissions of fugitive particulate matter from any emission unit, including material handling or storage activity, shall not be visible by an observer looking general toward the zenith at a point beyond property line of the source.
- 3. The throughput of the dry corn mill shall not exceed 100,000 bushels/day, monthly average.
- 4a.
  - i. The tail stock dryer shall only be heated by steam and shall not be equipped with direct-fired fuel burners.
  - ii. Emission from the tail stock dryer (115-06) shall not exceed 3.46 lb/hr and 15.004 tons/year for PM and 0.98 lb/hr and 4.29 tons/year for PM<sub>10</sub>. These limits are based on information in the application and continuous operation (8,760 hours/year).
- b.
  - i. Emissions of PM and PM<sub>10</sub> from emission units other than the tail stock dryer shall be controlled with fabric filter to comply with the following emission rates based on the type of unit, i.e., whole corn (elevator)- 0.002 gr/dscf, whole corn(mill)-0.001 gr/dscf, bran-0.00042 gr/dscf and milled corn-0.00047gr/dscf.
  - ii. Emissions of PM and PM<sub>10</sub> from other emission units in the dry corn mill shall not exceed the applicable limits in Attachment A and B.
- c. These Conditions in this permit are intended to assure that the increase in emissions from expansion of the dry corn mill is not significant pursuant to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. In particular, this permit only allows a 24.8 tons/year increase in PM and 14.8 tons/year increase PM<sub>10</sub> emission from this expansion.
- 5. At all times, the Permittee shall, maintain and operate emission units in the dry corn mill, including associated control devices, in a manner consistent with good air pollution control practice for minimizing emissions.
- 6. This permit does not revise or relax any other requirements contained in the Operating Permit 72121261 for the existing units in the Corn Processing Operations including any associated requirements for monitoring, recordkeeping or reporting.
- 7a. Upon written request from the Illinois EPA, the Permittee shall at his own expense, conduct test for PM and PM<sub>10</sub> emission and opacity in accordance with the applicable test methods and procedures as identified below.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2

Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter (PM)	USEPA Method 5
Particulate Matter (PM <sub>10</sub> )	USEPA Method 201A and 202
Opacity	USEPA Method 9

- b. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
- c. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:
  - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
  - ii. 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 emission unit and any control equipment will be determined.
  - iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.
  - iv. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.
  - v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- d. Copies of the Final Reports(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized. The Final Report shall include as a minimum:
  - i. A summary of results.
  - ii. General information.
  - iii. Description of test method(s), including description of sample points sampling train, analysis equipment, and test schedule.

- iv. Detailed description of test conditions, including:
    - A. Process information, e.g., equipment feed rate.
    - B. Control equipment information, i.e., equipment condition and operating parameters during testing.
  - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- 8a. The Permittee shall keep the following operation records for the dry corn mill:
- i. Corn milled based on the daily grind rate and relative loading and feed moisture levels (output %moisture), recorded at least once per shift;
  - ii. Throughput (bushels/day monthly average) based upon the above records.
- b. The Permittee shall keep the following operation records for the tail stock dryer:
- i. A copy of the written plan describing the procedures for operation and maintenance for the dryer and cyclones.
  - ii. Damper positions of the tail stock dryer cyclone dryer bypass air inlets once per shift during shift that this process unit is in operation.
- c. The Permittee shall keep an inspection and maintenance log for the tail stock dryer and associated cyclones and each other particulate matter control system;
- d. The Permittee shall keep the following records related to emissions:
- i. The maximum emission of PM and PM<sub>10</sub> (pound/hour) from each emission unit or group of emission units controlled by a single control device, considering maximum exhaust flow and nominal exhaust loading, with supporting documentation.
  - ii. An estimate of excess PM and PM<sub>10</sub> emissions from each incident when a unit did not comply with the limits required in this permit;
  - ii. Annual PM and PM<sub>10</sub> emission based on the throughput and the applicable emission factors and formulas with supporting calculations.

9. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) 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 request for records during the course of a source inspection.
10. If there is an exceedance of the requirements of this permit as determined by the records required by this permit or by other means, the Permittee shall submit a report to the Illinois EPA's 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.
11. Two copies of required reports and notifications concerning emissions equipment operation or performance testing shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276  
Telephone: 217/782-5811 Facsimile: 217/524-4710

and one 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  
2009 Mall Street  
Collinsville, Illinois 62234  
Telephone: 618/346-5120 Facsimile: 618/346-5155

The Permittee should update their CAAPP application to include changes at the source due to the corn mill expansion by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information to accomplish this.

If you have any questions on this, please call Ricardo Ng at 217/782-2113.

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

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cc: Illinois EPA, FOS Region 3  
Illinois EPA, Compliance Section  
Lotus Notes

**ATTACHMENT A  
CHANGE IN PM EMISSIONS**

<u>Emission Units<sup>1</sup></u>	<u>New hourly Limit Lb/Hr</u>	<u>Historic<sup>2</sup> Emissions Tons/Yr</u>	<u>New Annual<sup>3</sup> Limit Tons/Yr</u>	<u>Emission Increase Tons/Year</u>
<b><u>Elevator</u></b>				
West Headhouse Gallery Vacuum	0.009	0.027	0.038	0.010
Track six at Grade Vacuum	0.009	0.027	0.038	0.010
301-01	0.943	3.001	4.130	1.129
301-02	0.316	1.006	1.384	0.378
301-04	0.614	1.955	2.691	0.736
304-02	0.461	1.467	2.019	0.552
<b><u>Corn Mill House Vacuum</u></b>				
104-01	0.006	0.018	0.026	0.009
105-03	0.006	0.018	0.026	0.009
<b><u>Cleaning</u></b>				
110-08	0.016	0.038	0.071	0.033
110-09	0.351	0.829	1.539	0.710
115-02	0.492	0	2.154	2.154
<b><u>Corn Mill Preparation</u></b>				
101-01	0.145	0.427	0.635	0.208
101-02	0.121	0.356	0.529	0.173
103-04	0.040	0.237	0.176	-0.061
103-05		(Discharge to 101-02)		
105-04	0.280	0.825	1.226	0.401
105-06	0.121	0.356	0.529	0.173
115-03	0.162	0	0.710	0.710
115-04	0.181	0	0.794	0.794
115-05	0.003	0.010	0.015	0.005
115-06	3.426	0	15.004	15.004
<b><u>Corn Milling</u></b>				
101-04	0.151	0.445	0.662	0.216
101-05	0.088	0.259	0.385	0.126
103-04		(See Corn Mill Preparation)		
103-05		(See Corn Mill Preparation)		
105-04		(See Corn Mill Preparation)		
105-05	0.169	0.499	0.741	0.242
105-06		(See Corn Mill Preparation)		
109-01	0.054	0.158	0.235	0.077
109-02	0.052	0.154	0.229	0.075
<b><u>Bran Milling</u></b>				
101-01		(See Corn Mill Preparation)		
103-06	0.004	0.011	0.015	0.005
109-03	0.022	0.068	0.098	0.030
109-04	0.008	0.024	0.035	0.011
<b><u>Bins</u></b>				
104-02	0.145	0.427	0.635	0.208
105-06		(See Corn Mill Preparation)		

ATTACHMENT A (continued)

<u>Emission Units<sup>1</sup></u>	<u>New hourly Limit Lb/Hr</u>	<u>Historic<sup>2</sup> Emissions Tons/Yr</u>	<u>New Annual<sup>3</sup> Limit Tons/Yr</u>	<u>Emission Increase Tons/Year</u>
<u>Packing and Loading</u>				
103-06		(See Bran Milling)		
104-02		(See Bins)		
105-10	0	0.380	0	-0.380
110-04	0.007	0.020	0.029	0.010
110-05	0.014	0.040	0.060	0.020
110-07	0.018	0.052	0.078	0.025
111-34	0.005	0.015	0.022	0.007
115-01	0.181	0	0.794	0.794
<u>Reprocessing</u>				
112-31	0.145	0.427	0.635	0.208
<b>Totals</b>	<u>8.8</u>	<u>13.6</u>	<u>38.4</u>	<u>24.8</u>

**ATTACHMENT B  
CHANGE IN PM<sub>10</sub> EMISSIONS**

<b>Emission Units<sup>1</sup></b>	<b>New hourly Limit Lb/Hr</b>	<b>Historic<sup>2</sup> Emissions Tons/Yr</b>	<b>New Annual<sup>3</sup> Limit Tons/Yr</b>	<b>Emission Increase Tons/Year</b>
<b><u>Elevator</u></b>				
West Headhouse Gallery Vacuum	0.009	0.027	0.038	0.010
Track six at Grade Vacuum	0.009	0.027	0.038	0.010
301-01	0.943	3.001	4.130	1.129
301-02	0.316	1.006	1.384	0.378
301-04	0.614	1.955	2.691	0.736
304-02	0.461	1.467	2.019	0.552
<b><u>Corn Mill House Vacuum</u></b>				
104-01	0.009	0.029	0.038	0.009
105-03	0.009	0.029	0.038	0.009
<b><u>Cleaning</u></b>				
110-08	0.016	0.052	0.071	0.020
110-09	0.351	1.118	1.539	0.421
115-02	0.492	0	2.154	2.154
<b><u>Corn Mill Preparation</u></b>				
101-01	0.207	0.693	0.906	0.212
101-02	0.172	0.578	0.755	0.177
103-04	0.057	0.385	0.252	-0.134
103-05		(Discharge to 101-02)		
105-04	0.399	1.338	1.748	0.410
105-06	0.172	0.578	0.755	0.177
115-03	0.282	0	1.234	1.234
115-04	0.258	0	1.132	1.132
115-05	0.005	0.016	0.021	0.005
115-06	0.980	0	4.290	4.290
<b><u>Corn Milling</u></b>				
101-04	0.215	0.722	0.943	0.221
101-05	0.125	0.420	0.549	0.129
103-04		(See Corn Mill Preparation)		
103-05		(See Corn Mill Preparation)		
105-04		(See Corn Mill Preparation)		
105-05	0.241	0.809	1.056	0.248
105-06		(See Corn Mill Preparation)		
109-01	0.076	0.256	0.334	0.078
109-02	0.075	0.250	0.327	0.077
<b><u>Bran Milling</u></b>				
101-01		(See Corn Mill Preparation)		
103-06	0.006	0.019	0.027	0.008
109-03	0.039	0.120	0.170	0.051
109-04	0.014	0.042	0.060	0.018
<b><u>Bins</u></b>				
104-02	0.207	0.693	0.906	0.212
105-06		(See Corn Mill Preparation)		

ATTACHMENT B (continued)

<u>Emission Units<sup>1</sup></u>	<u>New hourly Limit Lb/Hr</u>	<u>Historic<sup>2</sup> Emissions Tons/Yr</u>	<u>New Annual<sup>3</sup> Limit Tons/Yr</u>	<u>Emission Increase Tons/Year</u>
<b><u>Packing and Loading</u></b>				
103-06		(See Bran Milling)		
104-02		(See Bins)		
105-10	0	0.616	0	-0.616
110-04	0.010	0.032	0.042	0.010
110-05	0.020	0.065	0.086	0.020
110-07	0.025	0.085	0.111	0.026
111-34	0.007	0.024	0.031	0.007
115-01	0.258	0	1.132	1.132
<b><u>Reprocessing</u></b>				
112-31	<u>0.207</u>	<u>0.693</u>	<u>0.906</u>	<u>0.212</u>
<b>Totals</b>	<b>7.3</b>	<b>17.1</b>	<b>31.9</b>	<b>14.8</b>

Notes: <sup>1</sup> Emission units are grouped by their associated control system. The identity of the emission units controlled by each control system is provided in the cross referenced table included in the application.

<sup>2</sup> Historic emissions are based on actual hours of operation and actual exhaust grain loading as referenced in the application.

<sup>3</sup> New Annual limits are based on maximum hours of operation and nominal exhaust grain loading.

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