Attachment 1. GPC's New and Modified Air Construction Permits

Air Quality Construction Permits
Collection of Air Permits

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Project/Process Description

Maltrin #3 Spray Dryer

Maximum Design Capacity: 3.13 tons of maltrin per hour, dry solid basis

Maximum Natural Gas Firing Rate: 18 MMBtu per hour (Natural gas fuel only)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Project Number: 16-344

Project Description: Remove requirement to modify control equipment and update to CAP

Date: 02/21/17

The permits in this document are issued in accordance with 567 Iowa Administrative Code Chapter 22, and are issued subject to the terms and conditions contained in this document. Issuance of the permits in this document shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law. If any permit contained in this document is modified, superseded, expires, or for any other reason changes or ceases to exist, the status of that permit shall not affect the validity or enforceability of any other permit contained in this document.

Under the Direction of the Director of the
Department of Natural Resources

List of Emission Units, Control Equipment, Emission Points, and Permits

EP#	EU#	Emission Unit Description	CE#	Control Equipment Description	Permit #	Stack Testing
132.1 (East Stack)	EU3111.0, EU3111.1	Maltrin # 3 Spray Dryer with Product Recovery Cyclones, Maltrin #3 Spray Dryer Direct-Fired Burner	CE3111-1	Venturi Scrubber	80-A-149-S6	Yes
132.2 (West Stack)			CE3111-2	Venturi Scrubber	80-A-150-S6	Yes

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in any permit contained in this "Collection of Air Permits".

A. The following combined emission limits shall not be exceeded for the following emission points:

EPs	Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
EP131.1, EP132.2	Sulfur Dioxide (SO_2)	0.011[3,4]	NA	NA	RACT, 23.3(3)"e"

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is based on a twelve (12) month rolling total.
3. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
4. Combined emission limit for EP132.1 and EP132.2.

B. The following emission limits shall not be exceeded per emission point:

EP	Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
132.1, 132.2	Particulate Matter (PM) – State	2.40[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
	Particulate Matter (PM) – State	NA	NA	0.03 gr/scf	567 IAC 31.20(1)"d", LAER
	PM_{10}	2.40[4]	NA	NA	NAAQS
	$PM_{2.5}$	0.90[5]	NA	NA	NAAQS
	Opacity	NA	NA	40%[6,7]	23.3(2)"d"
	Sulfur Dioxide (SO_2)	NA	NA	500 ppm_v	567 IAC 23.3(3)"e"

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Requested limits restrict potential PM emissions.
4. The limit for PM_{10} emissions is established to correspond to the emission rate used in the dispersion modeling required by the consent decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV016788, Iowa District Court in and for Muscatine County (July 17, 2006)].
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

2. Compliance Demonstration(s)

Compliance Demonstration Table

EP	Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
EP131.1, EP132.2	PM – State	Performance Testing	Once Every 3 Calendar Years[1]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
	PM_{10}[2]	Performance Testing	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
	$PM_{2.5}$[2,3]	Performance Testing	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
	Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
	SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C

[1] Performance testing for PM, PM_{10}, and $PM_{2.5}$ shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM_{10}, and $PM_{2.5}$ emission limits in condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM_{10}, and $PM_{2.5}$.

[2] It is acceptable to test for PM and to assume that all PM emissions are PM_{10} emissions.

[3] If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the $PM_{2.5}$ limit as specified in condition 1 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable $PM_{2.5}$ fraction shall be determined by conducting internal particle sizing of the dried maltodextrin product (immediately following the dryer) to determine the $PM_{2.5}$ fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered $PM_{2.5}$.

2. Compliance Demonstration(s) (continued)

For each Emission Point listed in the "Compliance Demonstration Table", initial stack test was completed on 08/02/16. Additional stack testing is required within 3 calendar years from the initial stack test.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission points shall conform to the specifications listed below:

EP ID	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
132.1	150	Vertical Unobstructed	42 inch Diameter	125	23,000
132.2	150	Vertical Unobstructed	42 inch Diameter	125	24,950

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

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5. Operating Requirements and Associated Recordkeeping

Unless specified by a federal regulation, all records as required by these permits shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping requirements for these permits shall be:

A. Within 90-days after permit issuance, the owner or operator shall install, calibrate and operate equipment to monitor differential pressure drop across Venturi Scrubber (CE3111-1) and Venturi Scrubber (CE3111-2) as specified in conditions 5C and 5E.

   i. The owner or operator shall maintain a record of installation date and operation commencement date of equipment to monitor differential pressure drop across Venturi Scrubber (CE3111-1) and Venturi Scrubber (CE3111-2).

B. The total flowrate of the Venturi Scrubber (CE3111-1) liquor shall be maintained at or above 148 gallons per minute.

   i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Venturi Scrubber (CE3111-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

   ii. The owner or operator shall collect and record the total liquor flow rate to Venturi Scrubber (CE3111-1), in gallons per minute, at least once per day. If the liquor flow rate to Venturi Scrubber (CE3111-1) falls below the value specified in Condition 5A, the owner or operator shall investigate Venturi Scrubber (CE3111-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE3111-1) is not in operation.

C. The differential pressure drop across the Venturi Scrubber (CE3111-1) shall be maintained between 6 and 17 inches of water column.

   i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across the Impingement Venturi Scrubber (CE3111-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

   ii. The owner or operator shall collect and record the pressure drop across Venturi Scrubber (CE3111-1), in inches of water, at least once per day. If the pressure drop across Venturi Scrubber (CE3111-1) falls outside the range specified in Condition 5 B., the owner or operator shall investigate Venturi Scrubber (CE3111-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Venturi Scrubber (CE3111-1) is not in operation.

5. Operating Requirements and Associated Recordkeeping (continued)

D. The total flowrate of the Venturi Scrubber (CE3111-2) liquor shall be maintained at or above 154 gallons per minute.

iii. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Venturi Scrubber (CE3111-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

iv. The owner or operator shall collect and record the total liquor flow rate to Venturi Scrubber (CE3111-2), in gallons per minute, at least once per day. If the liquor flow rate to Venturi Scrubber (CE3111-2) falls below the value specified in Condition 5C, the owner or operator shall investigate Venturi Scrubber (CE3111-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE3111-2) is not in operation.

E. The differential pressure drop across the Venturi Scrubber (CE3111-2) shall be maintained between 6 and 17 inches of water column.

iii. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across the Impingement Venturi Scrubber (CE3111-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

iv. The owner or operator shall collect and record the pressure drop across Venturi Scrubber (CE3111-2), in inches of water, at least once per day. If the pressure drop across Venturi Scrubber (CE3111-2) falls outside the range specified in Condition 5D, the owner or operator shall investigate Venturi Scrubber (CE3111-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Venturi Scrubber (CE3111-2) is not in operation.

F. The owner or operator shall develop an operating and maintenance plan for Venturi Scrubber (CE3111-1) and Venturi Scrubber (CE3111-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Venturi Scrubber (CE3111-1) and the monitoring devices.

ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Venturi Scrubber (CE3111-2) and the monitoring devices.

G. The owner or operator shall maintain Product Recovery Cyclones in manner to ensure proper operation.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclones.

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6. Continuous Emission Monitoring

Continuous emission monitoring is not required by these permits at this time.

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7. Department Review

These permits are issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. These permits are issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause the affected permit or permits to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

These permits are for the construction and operation of specific emission unit(s), control equipment, and emission point(s) as described in these permits and in the applications for these permits. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in these permits conform to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter any of the emission unit(s), or emission point(s), or the associated control equipment without the required amended permit(s).

Any owner or operator of the specified emission unit(s), emission point(s), or associated control equipment, including any person who becomes an owner or operator subsequent to the issuance date of the affected permit(s), is responsible for assuring that the installation, operation, and maintenance of the equipment listed in the permit(s) is in compliance with the provisions of the permit(s) and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, these permit(s) are not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

The permit or amendment shall become void if any one of the following conditions occurs:
(1) the construction or implementation of the proposed project, as it affects each emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) the construction or implementation of the proposed project, as it affects each emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) the construction or implementation of the proposed project, as it affects each emission point permitted herein, is not completed within a time period specified elsewhere in the permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend the permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) The permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

10. Construction (continued)

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

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11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See Permit Condition 12.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition (See Permit Condition 12.B.2).

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12. Notification, Reporting, and Recordkeeping

These requirements shall apply to each permit included in this "Collection of Air Permits."

A. The owner or operator shall furnish the Department the following written notifications:
(1) Per 567 IAC 22.3(3)"b":
(a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
(b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
(2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
(a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
(b) At least seven (7) days before equipment relocation.
(3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
- The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.

(4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
- The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under each permit in this "Collection of Air Permits" shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding any permit in this "Collection of Air Permits" shall be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Project No.	Permit No.	Description	Date
80-210	80-A-149 80-A-150	Original Permit	09/24/80
----------	80-A-149-S1 80-A-150-S1	Amended PM LAER Limit based on compliance testing	02/14/84
01-467	80-A-149-S2 80-A-150-S2	Increased airflow through the dryer by about 10% (as-built)	10/15/02
03-072	80-A-149-S3 80-A-150-S3	Amended PM & PM_{10} allowables	02/07/02
03-113	80-A-149-S4 80-A-150-S4	Amended PM_{10} allowable	06/24/03
15-050	80-A-149-S5 80-A-150-S5	Increase Stack Height, Modify Scrubber, Decrease PM_{10} Emission Limit and Add $PM_{2.5}$ and SO_2 Emission Limits.	12/10/15

END OF PERMIT

Air Quality Construction Permits
Collection of Air Permits

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Mgr., Environmental Services

(563) 264-4569
Mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA, 52761

Responsible Party:
Ron Zitzow
Senior Vice President

Project/Process Description

Maltrin #4 Spray Dryer

Maximum Design Capacity: 5.55 tons of maltrin per hour, dry solids basis

Maximum Natural Gas Firing Rate: 28.8 MMBtu per hour (Natural gas fuel only)

Equipment Location: 1600 Oregon Street
Muscatine, IA, 52761

Project Number: 19-307

Project Description: Modify operating limit range for wet scrubbers CE3110-1 and CE3110-2

Date: May 19, 2020

The permits in this document are issued in accordance with 567 Iowa Administrative Code Chapter 22, and are issued subject to the terms and conditions contained in this document. Issuance of the permits in this document shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law. If any permit contained in this document is modified, superseded, expires, or for any other reason changes or ceases to exist, the status of that permit shall not affect the validity or enforceability of any other permit contained in this document.

Under the Direction of the Director of the
Department of Natural Resources

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List of Emission Units, Control Equipment, Emission Points, and Permits

EP#	Emission Unit Description	Control Equipment Description	Permit #	Stack Testing
135.0 (East Stack)	Maltrin #4 Spray Dryer with Product Recovery Cyclones (EU3110.0) and Maltrin #4 Spray Dryer Direct Fired Low-NOx Line Burner (EU3110.1)	Packed Bed Scrubber (CE3110-1)	85-A-031-S5	Yes
136.0 (West Stack)		Packed Bed Scrubber (CE3110-2)	85-A-032-S5	Yes
		Product Transfer Baghouse (CE3110-3)		

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in any permit contained in this "Collection of Air Permits".

A. The following combined emission limits shall not be exceeded for the following emission points:

EPs	Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
EP135.0, EP136.0	Sulfur Dioxide (SO_2)	0.017[3,4]	NA	NA	RACT, 567 IAC 23.3(3)"e"

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
[4] Combined emission limit for EP135.0 and EP136.0.

B. The following emission limits shall not be exceeded per emission point:

EP	Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
135.0	Particulate Matter (PM) – State	2.12[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
	Particulate Matter (PM) – State	NA	NA	0.03 gr/scf	567 IAC 31.20(1)"d", LAER
	PM_{10}	2.12[3,4]	NA	NA	NAAQS
	$PM_{2.5}$	0.80[3,5]	NA	NA	NAAQS
	Opacity	NA	NA	40%[6,7]	567 IAC 23.3(2)"d"
	Sulfur Dioxide (SO_2)	NA	NA	500 ppm_v	567 IAC 23.3(3)"e"
	Nitrogen Oxides (NO_x)	NA	NA	0.04 lb/MMBTU[3,8]	NA
	Volatile Organic Compounds (VOC)	NA	NA	4.7 $ppm_{v,d}$[3,8]	NA
	Carbon Monoxide (CO)	NA	NA	0.074 lb/MMBTU[3,8]	NA
136.0	Particulate Matter (PM) – State	3.26[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
	Particulate Matter (PM) – State	NA	NA	0.03 gr/scf	567 IAC 31.20(1)"d", LAER
	PM_{10}	3.26[3,4]	NA	NA	NAAQS
	$PM_{2.5}$	1.0[3,5]	NA	NA	NAAQS
	Opacity	NA	NA	40%[6,7]	567 IAC 23.3(2)"d"
	Sulfur Dioxide (SO_2)	NA	NA	500 ppm_v	567 IAC 23.3(3)"e"
	Nitrogen Oxides (NO_x)	NA	NA	0.04 lb/MMBTU[3,8]	NA
	Volatile Organic Compounds (VOC)	NA	NA	4.7 $ppm_{v,d}$[3,8]	NA
	Carbon Monoxide (CO)	NA	NA	0.074 lb/MMBTU[3,8]	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit restricts potential PM, PM_{10}, $PM_{2.5}$ CO, NOx and VOC emission below PSD significance levels and Project 15-113 was considered a minor modification for the purposes of PSD.
4. The emission limit used in facility wide PM_{10} dispersion modeling analysis that indicates predicted attainment of the PM_{10} National Ambient Air Quality Standards (NAAQS).
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of "No visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
8. The limit for NOx, CO and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

2. Compliance Demonstration(s)

Compliance Demonstration Table

EP	Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
EP135.0 EP136.0	PM – State	Performance Testing	Once Every 3 Calendar Years[1]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
	PM_{10}[2]	Performance Testing	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
	$PM_{2.5}$[2,3]	Performance Testing	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
	Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
	SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C
	NO_x	None	NA	1 hour	40 CFR 60, Appendix A, Method 7E
	VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
	CO	None	NA	1 hour	40 CFR 60, Appendix A, Method 10

[1] Performance testing for PM, PM_{10}, and $PM_{2.5}$ shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM_{10}, and $PM_{2.5}$ emission limits in condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM_{10}, and $PM_{2.5}$. Because the last performance test was conducted on April 2, 2019, the next test required by these permits shall be conducted no later than April 2, 2022.

[2] It is acceptable to test for PM and to assume that all PM emissions are PM_{10} emissions.

[3] If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the $PM_{2.5}$ limit as specified in condition 1 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable $PM_{2.5}$ fraction shall be determined by conducting internal particle sizing of the dried maltodextrin product (immediately following the dryer) to determine the $PM_{2.5}$ fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered $PM_{2.5}$.

For each Emission Point listed in the "Compliance Demonstration Table", if an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of the permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission points shall conform to the specifications listed below:

EP ID	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
135.0	144 Feet	Vertical Unobstructed	42 inches	125°F	25,272 scfm
136.0	144 Feet	Vertical Unobstructed	42 inches	125°F	26,942 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

NOTE: The absence of the inclusion of any NSPS requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS conditions.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

These emission units are not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

NOTE: The absence of the inclusion of any NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NESHAP conditions.

5. Operating Requirements and Associated Recordkeeping

Unless specified by a federal regulation, all records as required by these permits shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping requirements for these permits shall be:

A. The total flowrate for Packed Bed Scrubber (CE3110-1) liquor shall be maintained at or above 500 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Packed Bed Scrubber (CE3110-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to Packed Bed Scrubber (CE3110-1), in gallons per minute, at least once per day. If the liquor flow rate to the Packed Bed Scrubber (CE3110-1) falls below the value specified in Condition 5A, the owner or operator shall investigate the Packed Bed Scrubbers (CE3110-1) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE3110-1) is not in operation.

B. The total flowrate for Packed Bed Scrubber (CE3110-2) liquor shall be maintained at or above 500 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Packed Bed Scrubber (CE3110-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to the Packed Bed Scrubber (CE3110-2), in gallons per minute, at least once per day. If the liquor flow rate to the Packed Bed Scrubber (CE3110-2) falls below the value specified in Condition 5B, the owner or operator shall investigate the Packed Bed Scrubber (CE3110-2) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE3110-2) is not in operation.

C. The differential pressure drop across each Packed Bed Scrubber (CE3110-1 and CE3110-2) shall be maintained between 0.3 and 5 inches of water column as a 1-hour block average.

i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across each Packed Bed Scrubber (CE3110-1 and CE3110-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across each Packed Bed Scrubber (CE3110-1 and CE3110-2), in inches of water, on a continuous basis. The owner or operator shall calculate and record the 1-hour block average of the differential pressure drop across each Packed Bed Scrubber in inches water column. If the 1-hour block average pressure drop across either Packed Bed Scrubbers (CE3110-1 and CE3110-2) falls outside the range specified in Condition 5C., the owner or operator shall investigate the Packed Bed Scrubber(s) (CE3110-1 and CE3110-2) and make corrections to the scrubber(s). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Packed Bed Scrubbers (CE3110-1 and CE3110-2) are not in operation.

D. The owner or operator shall develop an operating and maintenance plan for each Packed Bed Scrubber (CE3110-1 and CE3110-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3110-1) and the monitoring devices.

ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3110-2) and the monitoring devices.

5. Operating Requirements and Associated Recordkeeping (continued)

E. The differential pressure drop across the Baghouse (CE3110-3) shall be maintained between 1 and 6 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across the Baghouse (CE3110-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across the Baghouse (CE3110-3), in inches of water, at least once per day. If the pressure drop across the Baghouse (CE3110-3) falls outside the range specified in Condition 5E, the owner or operator shall investigate the Baghouse (CE3110-3) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Baghouse (CE3110-3) is not in operation.

F. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE3110-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE3110-3).

G. The owner or operator shall maintain the Product Recovery Cyclones in a manner to ensure proper operation.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclones.

H. The owner or operator shall tune the Low-NOx Line Burner (EU3110.1) on an annual basis to maintain good combustion. The annual burner tune-up activity shall include at a minimum:

- Inspect the burner-Clean and replace any components, as necessary
- Inspect the flame pattern and flame dimensions-Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications, if available.
- Inspect the air-to fuel ratio control system-Ensure the control system is calibrated and functioning properly, if such a system is installed.
- Optimize emissions of carbon dioxide- Optimize emissions consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which unit may be subject.
- Verify that emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.

I. The owner or operator shall maintain record on annual basis of the following:

- The completion date of Low-NOx Line Burner (EU3110.1) tuning as specified in condition 5H,
- Low-NOx Line Burner (EU3110.1) emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.

J. The owner or operator shall develop an operating and maintenance plan for the Low-NOx Line Burner (EU3110.1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Low-NOx Line Burner (EU3110.1).

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6. Continuous Emission Monitoring

Continuous emission monitoring is not required by these permits at this time.

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7. Department Review

These permits are issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. These permits are issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause the affected permit or permits to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

These permits are for the construction and operation of specific emission unit(s), control equipment, and emission point(s) as described in these permits and in the applications for these permits. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in these permits conform to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter any of the emission unit(s), or emission point(s), or the associated control equipment without the required amended permit(s).

Any owner or operator of the specified emission unit(s), emission point(s), or associated control equipment, including any person who becomes an owner or operator subsequent to the issuance date of the affected permit(s), is responsible for assuring that the installation, operation, and maintenance of the equipment listed in the permit(s) is in compliance with the provisions of the permit(s) and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, these permit(s) are not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

The permit or amendment shall become void if any one of the following conditions occurs:
(1) the construction or implementation of the proposed project, as it affects each emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) the construction or implementation of the proposed project, as it affects each emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) the construction or implementation of the proposed project, as it affects each emission point permitted herein, is not completed within a time period specified elsewhere in the permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend the permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) The permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shut down within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See Permit Condition 12.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition (See Permit Condition 12.B.2).

12. Notification, Reporting, and Recordkeeping

These requirements shall apply to each permit included in this "Collection of Air Permits."

A. The owner or operator shall furnish the Department the following written notifications:
(1) Per 567 IAC 22.3(3)"b":
(a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
(b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
(2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
(a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
(b) At least seven (7) days before equipment relocation.
(3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
- The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.

(4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
- The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under each permit in this "Collection of Air Permits" shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding any permit in this "Collection of Air Permits" shall be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E. 9th St. Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Project No.	Permit No.	Description	Date
85-030	85-A-031 85-A-032	Original Permit	03/26/85
09-281	85-A-031-S1 85-A-032-S1	Increase Stack Height and Modify PM/PM_{10} Emission Limits	07/16/09
15-050	85-A-031-S2 85-A-032-S2	Increase Stack Height, Add $PM_{2.5}$, SO_2 and VOC Emission Limits.	12/10/15
15-113	85-A-031-S3 85-A-032-S3	Low-NOx Burner Installation, Decrease Stack Height	06/06/16
16-344	85-A-031-S4 85-A-032-S4	Remove requirement to increase stack height to 154 feet and update to CAP	02/21/17
19-307	85-A-031-S5 85-A-032-S5	Modify operating limit range for wet scrubbers CE3110-1 and CE3110-2	05/19/20

END OF PERMIT

Air Quality Construction Permit

Permit Number: 91-A-068-S3

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP 174.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
1245.0	GP2, #4 Gluten Pre-Mill Cooling System	6.13 tons of dried gluten per hour	GP2, Product Baghouse (CE1245-1)
1246.0	GP2, #4 Gluten Mill	6.13 tons of dried gluten per hour	

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-198	Increase Maximum Capacity	None	11/04/19

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	0.41[3]	NA	0.1 gr/dscf[1]	PSD Synthetic Minor, 23.4(7)
PM_{10}	0.41[3,4]	NA	NA	PSD Synthetic Minor
$PM_{2.5}$	0.150[5]	NA	NA	NA
Opacity	NA	NA	40%[6,7]	23.3(2)"d"
Sulfur Dioxide (SO_2)	0.37[8]	NA	10.0 $ppm_{v,d}$[1,9]	RACT
Volatile Organic Compounds (VOC)		NA	15.0 $ppm_{v,d}$[1,9]	PSD Synthetic Minor

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limits established to avoid PSD applicability and keep Project 90-257 minor PSD. Project 90-257 netted out of review for PM and PM_{10} using credits obtained from the shutdown of several streets in December of 1990. Any future projects that reevaluate the netting for this time period will require the facility to submit a model examining the equivalency of the increased stack emissions to be credited to road closure emissions.
4. The emission limit used in facility wide PM_{10} dispersion modeling analysis that indicates predicted attainment of the PM_{10} National Ambient Air Quality Standards (NAAQS).
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
8. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
9. The limit for SO_2 and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	82 Feet
Discharge Style	Vertical Unobstructed Discharge
Stack Outlet Dimensions (inches)	18 inches Diameter
Exhaust Temperature (°F)	115 °F
Exhaust Flowrate (scfm)	8295 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The pressure drop across GP2, Product Baghouse (CE1245-1) shall be maintained between 0.1 to 10 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the GP2, Product Baghouse (CE1245-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across the GP2, Product Baghouse (CE1245-1), in inches of water, once per calendar day. If the pressure drop across the GP2, Product Baghouse (CE1245-1) falls outside the range specified in Condition 5A, the owner or operator shall investigate the Impingent Wet Scrubber (CE1244-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP2, Product Baghouse (CE1245-1) is not in operation.

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

B. The owner or operator shall develop an operating and maintenance plan for GP2, Product Baghouse (CE1245-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP2, Product Baghouse (CE1245-1).

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6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

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7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

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8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

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9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

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10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

12. Notification, Reporting, and Recordkeeping (Continued)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E 9th Street Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
91-A-068	90-257	Permit Source	04/05/91	Yes
91-A-068-S1	05-697	Replace Baghouse	12/22/05	No
91-A-068-S2	15-050	Modify PM, PM_{10} Emission Limits; add $PM_{2.5}$, SO2 and VOC Emission Limits	12/10/15	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 92-A-383-S3

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director, Environmental Services

(563) 264-4569
Mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

Permitted Equipment

Emission Point ID: EP179.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
EU1258.0	Gluten Surge Bin, Feed Loading Surge Bin, GP2 #1 Feed Truck Loadout	100 tons of feed per hour	Pulse Jet Baghouse – West Hood Baghouse (CE1258-1)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
16-036	Correct Maximum Capacity; modify flow rate based on testing	No	10/11/16

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.50[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
PM_{10}	0.50[3,4]	NA	NA	NAAQS
$PM_{2.5}$	0.150[5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	0.25[8]	NA	5.0 $ppm_{v,d}$[1,9]	RACT
Volatile Organic Compounds (VOC)	NA	NA	3.0 $ppm_{v,d}$[1,9]	NA

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] Limit maintains Project 92-120 as minor project for the purposes of PSD review.
[4] The limit for PM_{10} emissions is established to correspond to the emission rate used in the dispersion modeling required by the consent decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV016788, Iowa District Court in and for Muscatine County (July 17, 2006)].
[5] The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
[6] The emission limit is based on a six (6) minute average.
[7] An exceedance of the indicator opacity of "No visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
[8] The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
[9] The limits for SO_2 and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the time applicable period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

2. Compliance Demonstration(s) (Continued)

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	75 Feet
Discharge Style	Vertical, Unobstructed Discharge
Stack Outlet Dimensions (inches)	30 inches Diameter
Exhaust Temperature (^{o}F)	Ambient
Exhaust Flowrate (scfm)	21,670 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

These emission units are not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

These emission units are not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The differential pressure drop across the Pulse Jet Baghouse (CE1258-1) shall be maintained between 0.1 and 6 inches water column.

B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE1258-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

C. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE1258-1), in inches of water, on a daily basis. If the pressure drop across the Pulse Jet Baghouse (CE1258-1) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Pulse Jet Baghouse (CE1258-1) and make corrections to the Pulse Jet Baghouse (CE1258-1). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE1258-1) is not in operation.

D. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1258-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE1258-1).

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
92-A-383	92-120	Original Permit	06/19/92	Yes
92-A-383-S1	06-162	Change Air Flow Rate due to Stack Test of August 2005 (formerly Animal Feed Mix Production)	06/20/06	No
92-A-383-S2	15-051	Stack Height Increase, Establish $PM_{2.5}$ & SO_2 limit	07/06/15	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 92-A-385-S2

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director, Environmental Services

(563) 264-4569
Mick.durham@grainprocessing.com

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP180.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
EU1259.0	Gluten Surge Bin, Feed Loading Surge Bin, GP2 #2 Feed Truck Loadout	100 tons of feed per hour	Pulse Jet Baghouse – East Hood Baghouse (CE1259-1)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
16-036	Correct Maximum Capacity; modify flowrate based on testing	No	10/11/16

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.50[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
PM_{10}	0.50[3,4]	NA	NA	NAAQS
$PM_{2.5}$	0.150[5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	0.25[8]	NA	5.0 $ppm_{v,d}$[1,9]	RACT
Volatile Organic Compounds (VOC)	NA	NA	3.0 $ppm_{v,d}$[1,9]	NA

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] Limit maintains Project 92-120 as minor project for the purposes of PSD review.
[4] The limit for PM_{10} emissions is established to correspond to the emission rate used in the dispersion modeling required by the consent decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV016788, Iowa District Court in and for Muscatine County (July 17, 2006)].
[5] The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
[6] The emission limit is based on a six (6) minute average.
[7] An exceedance of the indicator opacity of "No visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
[8] The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
[9] The limits for SO_2 and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the time applicable period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

2. Compliance Demonstration(s) (Continued)

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	75 Feet
Discharge Style	Vertical, Unobstructed Discharge
Stack Outlet Dimensions (inches)	30 inches Diameter
Exhaust Temperature (^{o}F)	Ambient
Exhaust Flowrate (scfm)	21,670 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

These emission units are not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

These emission units are not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The differential pressure drop across the Pulse Jet Baghouse (CE1259-1) shall be maintained between 0.1 and 6 inches water column.

B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE1259-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

C. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE1259-1), in inches of water, on a daily basis. If the pressure drop across the Pulse Jet Baghouse (CE1259-1) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Pulse Jet Baghouse (CE1259-1) and make corrections to the Pulse Jet Baghouse (CE1259-1). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE1259-1) is not in operation.

D. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1259-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE1259-1).

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
92-A-385	92-120	Original Permit	06/19/92	Yes
92-A-385-S1	15-051	Stack Height Increase, Establish $PM_{2.5}$ & SO_2 limit	07/06/15	Yes

END OF PERMIT

Air Quality Construction Permits
Collection of Air Permits

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Project/Process Description

Maltrin #6 Spray Dryer

Maximum Design Capacity: 9.84 tons of maltrin per hour, dry solids basis

Maximum Natural Gas Firing Rate: 44 MMBtu per hour (Natural gas fuel only)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Project Number: 21-058

Project Description: Install New Low Emissions Burner System

Date: 05/13/21

The permits in this document are issued in accordance with 567 Iowa Administrative Code Chapter 22, and are issued subject to the terms and conditions contained in this document. Issuance of the permits in this document shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law. If any permit contained in this document is modified, superseded, expires, or for any other reason changes or ceases to exist, the status of that permit shall not affect the validity or enforceability of any other permit contained in this document.

Under the Direction of the Director of the
Department of Natural Resources

[PZ]

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List of Emission Units, Control Equipment, Emission Points, and Permits

EP#	Emission Unit Description	Control Equipment Description	Permit #	Stack Testing
186.0 (East Stack)	Maltrin #6 Spray Dryer with Product Recovery Cyclones (EU3116.0) and Maltrin #6 Spray Dryer Low-NOx Direct-Fired Burner (EU3116.1)	Packed Bed Scrubber (CE3116-1)	94-A-055-S3	Yes
187.0 (West Stack)		Packed Bed Scrubber (CE3116-2) Product Transfer Baghouse (CE3116-3)	94-A-061-S3	Yes

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in any permit contained in this "Collection of Air Permits".

A. The following combined emission limits shall not be exceeded for the following emission points:

EPs	Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
EP186.0, EP187.0	Sulfur Dioxide (SO_2)	0.027[3,4]	NA	NA	RACT

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is based on a twelve (12) month rolling total.
3. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
4. Combined emission limit for EP186.0 and EP187.0.

B. The following emission limits shall not be exceeded per emission point:

EP	Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
186.0, 187.0	Particulate Matter (PM) – State	1.76[3]	NA	0.1 gr/dscf[1]	567 IAC 23.4(7)
	PM_{10}	1.76[3,4]	NA	NA	NAAQS
	$PM_{2.5}$	0.663[5]	NA	NA	NAAQS
	Opacity	NA	NA	40%[6,7]	23.3(2)"d"
	Sulfur Dioxide (SO_2)	NA	NA	500 ppm_v[1]	567 IAC 23.3(3)"e"
	Nitrogen Oxides (NO_x)	NA	NA	0.04 lbs/MMBtu[1,8]	NA
	Volatile Organic Compounds (VOC)	NA	NA	9.2 $ppm_{v,d}$[1,8]	NA
	Carbon Monoxide (CO)	NA	NA	0.074 lbs/MMBtu[1,8]	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Requested emission limits maintain project 93-200 below PSD significant rates for PM and PM_{10}. Project 93-200 netted out of review for PM and PM_{10} using credits obtained from the paving of two roads at the facility in November of 1992. Any future projects that reevaluate the netting for this time period will require the facility to submit a model examining the equivalency of the increased stack emissions to the credited road closure emissions.
4. The emission limit used in facility wide PM_{10} dispersion modeling analysis that indicates predicted attainment of the PM_{10} National Ambient Air Quality Standards (NAAQS).
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of "No visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
8. The limit for NO_x, CO and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

2. Compliance Demonstration(s)

Compliance Demonstration Table

EP	Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
EP186.0 EP187.0	PM – State	Performance Testing	Once Every 3 Calendar Years[1]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
	PM_{10}[2]	Performance Testing	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
	$PM_{2.5}$[2,3]	Performance Testing	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
	Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
	SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C
	NO_x	Performance Testing	One-time	1 hour	40 CFR 60, Appendix A, Method 7E
	VOC	Performance Testing	One-time	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
	CO	Performance Testing	One-time	1 hour	40 CFR 60, Appendix A, Method 10

[1] Performance testing for PM, PM_{10}, and $PM_{2.5}$ shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM_{10}, and $PM_{2.5}$ emission limits in condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM_{10}, and $PM_{2.5}$.

[2] It is acceptable to test for PM and to assume that all PM emissions are PM_{10} emissions.

[3] If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the $PM_{2.5}$ limit as specified in condition 1 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable $PM_{2.5}$ fraction shall be determined by conducting internal particle sizing of the dried maltodextrin product (immediately following the dryer) to determine the $PM_{2.5}$ fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered $PM_{2.5}$.

For each Emission Point listed in the "Compliance Demonstration Table", if an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of Low-NOx Burner (EU3116.1).

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

2. Compliance Demonstration(s) (continued)

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission points shall conform to the specifications listed below:

EP ID	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
186.0	137	Vertical Unobstructed	72 inch Diameter	117	49,267
187.0	137	Vertical Unobstructed	72 inch Diameter	117	49,267

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements and Associated Recordkeeping

Unless specified by a federal regulation, all records as required by these permits shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping requirements for these permits shall be:

Control Equipment- Scrubbers

A. The total flowrate for Packed Bed Scrubber (CE3116-1) liquor shall be maintained at or above 1141 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Packed Bed Scrubber (CE3116-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to each Packed Bed Scrubber (CE3116-1), in gallons per minute, at least once per day. If the liquor flow rate to either Packed Bed Scrubber (CE3116-1) falls below the value specified in Condition 5A, the owner or operator shall investigate Packed Bed Scrubber (CE3116-1) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE31116-1) are not in operation.

B. The total flowrate for Packed Bed Scrubber (CE3116-2) liquor shall be maintained at or above 1169 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to each Packed Bed Scrubber (CE3116-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to Packed Bed Scrubber (CE3116-2), in gallons per minute, at least once per day. If the liquor flow rate to Packed Bed Scrubber (CE3116-2) falls below the value specified in Condition 5B, the owner or operator shall investigate Packed Bed Scrubber (CE3116-2) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE3116-2) are not in operation.

C. The differential pressure drop across each Packed Bed Scrubber (CE3116-1 and CE3116-2) shall be maintained between 1 and 8 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across each Packed Bed Scrubber (CE3116-1 and CE3116-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across each Packed Bed Scrubber (CE3116-1 and CE3116-2), in inches of water, at least once per day. If the pressure drop across either Packed Bed Scrubbers (CE3116-1 and CE3116-2) falls outside the range specified in Condition 5C., the owner or operator shall investigate Packed Bed Scrubbers (CE3116-1 and CE3116-2) and make corrections to the scrubbers. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Packed Bed Scrubbers (CE3116-1 and CE3116-2) are not in operation.

5. Operating Requirements and Associated Recordkeeping (continued)

D. The owner or operator shall develop an operating and maintenance plan for each Packed Bed Scrubber (CE3116-1 and CE3116-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3116-1) and the monitoring devices.

ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3116-2) and the monitoring devices.

Control Equipment-Baghouse

E. The differential pressure drop across Baghouse (CE3116-3) shall be maintained between 0.25 and 6 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE3116-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE3116-3), in inches of water, at least once per day. If the pressure drop across Baghouse (CE3116-3) falls outside the range specified in Condition 5E. the owner or operator shall investigate Baghouse (CE3116-3) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE3116-3) are not in operation.

F. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE3116-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE3116-3).

Low-NOx Burner (EU3116.1)

G. The owner or operator shall tune Low-NOx Burner (EU3116.1) on an annual basis to maintain good combustion. The annual burner tune-up activity shall include at a minimum:

- Inspect the burner-Clean and replace any components, as necessary
- Inspect the flame pattern and flame dimensions-Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications, if available.
- Inspect the air-to fuel ratio control system-Ensure the control system is calibrated and functioning properly, if such a system is installed.
- Optimize emissions of carbon monoxide - Optimize emissions consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which unit may be subject.
- Verify that emissions (carbon monoxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.

H. The owner or operator shall maintain record on annual basis of the following:

- The completion date of burner (EU3116.1) tuning as specified in condition 5G,
- Burner (EU3116.1) emissions (carbon monoxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.

I. The owner or operator shall develop an operating and maintenance plan for the Low-NOx Burner (EU3116.1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of burner (EU3116.1).

5. Operating Requirements and Associated Recordkeeping (continued)

Other Requirements

J. The owner or operator shall maintain Product Recovery Cyclones in manner to ensure proper operation.
   i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclones.

Project Completion

K. The owner or operator shall install and commence operation of Low-NOx Burner (EU3116.1) by December 31, 2022.

   i. The owner or operator shall maintain a record of installation date and operation commencement date of Low-NOx Burner (EU3116.1).

6. Continuous Emission Monitoring

Continuous emission monitoring is not required by these permits at this time.

7. Department Review

These permits are issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. These permits are issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause the affected permit or permits to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

These permits are for the construction and operation of specific emission unit(s), control equipment, and emission point(s) as described in these permits and in the applications for these permits. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in these permits conform to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter any of the emission unit(s), or emission point(s), or the associated control equipment without the required amended permit(s).

Any owner or operator of the specified emission unit(s), emission point(s), or associated control equipment, including any person who becomes an owner or operator subsequent to the issuance date of the affected permit(s), is responsible for assuring that the installation, operation, and maintenance of the equipment listed in the permit(s) is in compliance with the provisions of the permit(s) and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, these permit(s) are not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

The permit or amendment shall become void if any one of the following conditions occurs:
(1) the construction or implementation of the proposed project, as it affects each emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) the construction or implementation of the proposed project, as it affects each emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) the construction or implementation of the proposed project, as it affects each emission point permitted herein, is not completed within a time period specified elsewhere in the permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend the permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) The permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

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11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See Permit Condition 12.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition (See Permit Condition 12.B.2).

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12. Notification, Reporting, and Recordkeeping

These requirements shall apply to each permit included in this "Collection of Air Permits."

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under each permit in this "Collection of Air Permits" shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

12. Notification, Reporting, and Recordkeeping (continued)

D. Information regarding any permit in this "Collection of Air Permits" shall be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Project No.	Permit No.	Description	Date
93-200	94-A-055 94-A-061	Original Permit	01/26/94
15-050	94-A-055-S1 94-A-061-S1	Increase Stack Height, Modify PM Emission Limit and Add $PM_{2.5}$, SO_2 and VOC Emission Limits.	12/10/15
16-344	94-A-055-S2 94-A-061-S2	Remove requirement to increase stack height to 147 feet and update to CAP	02/21/17
21-058	94-A-055-S3 94-A-061-S3	Install New Low Emissions Burner System	05/13/21

END OF PERMIT

Air Quality Construction Permit

Permit Number: 02-A-781-S3

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP190A (also known as 190.1)

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
1256.0	GP2 Gluten Loadout Pneumatic Transport System	32 tons of gluten per hour	Pulse Jet Baghouse (CE1256-1)-East Gluten Receiver Baghouse

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-340	Amend VOC Limit	None	02/08/18

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for EP190A shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	0.11[3]	NA	0.1 gr/dscf[1]	23.4(7)
PM_{10}	0.11[3,4]	NA	NA	NAAQS
$PM_{2.5}$	0.021[5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	23.3(2)"d"
Sulfur Dioxide (SO_2)	0.125[8]	NA	5.0 $ppm_{v,d}$[1,9]	RACT
Volatile Organic Compounds (VOC)	NA	NA	14.8 $ppm_{v,d}$[1,9]	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit maintains Projects 92-120 and01-169 as minor projects for the purposes of PSD review.
4. The limit for PM_{10} emissions is established to correspond to the emission rate used in the dispersion modeling required by the consent decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV016788, Iowa District Court in and for Muscatine County (July 17, 2006)].
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
8. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
9. The limits for SO_2 and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}[1]	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$[2]	None	NA	3 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

1. Performance testing may be conducted for total particulate matter to demonstrate compliance with PM_{10} limit as specified in permit condition 10.
2. If method 40 CFR 51, Appendix M, 201A cannot be performed due to stack blockage then the owner operator shall add a temporary stack extension to perform method 40 CFR 51, Appendix M, 201A. The temporary stack extension shall conform to 40 CFR Part 60, Appendix A, Method 1.

2. Compliance Demonstration(s) (continued)

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	77 Feet
Discharge Style	Downward Discharge
Stack Outlet Dimensions (inches)	12 inches Diameter
Exhaust Temperature (°F)	80 °F
Exhaust Flowrate (scfm)	2850 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

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5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The differential pressure drop across Baghouse (CE1256-1) shall be maintained between 0.3 and 6 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE1256-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE1256-1), in inches of water, continuously. If the pressure drop across Baghouse (CE1256-1) falls outside the range specified in Condition 5A, the owner or operator shall investigate Baghouse ((CE1256-1) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE1256-1) are not in operation.

B. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE1256-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE1256-1).

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6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

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7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

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8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (b) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (c) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

12. Notification, Reporting, and Recordkeeping (Continued)

(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
02-A-781	01-169	"As-built" Permit	10/17/02	Yes
02-A-781-S1	11-297	Add PM_{10} NAAQS Emission Limit and Modify Stack Characteristics	05/17/02	No
02-A-781-S2	15-051	Establish $PM_{2.5}$ & SO_2 limit	07/06/15	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 02-A-782-S3

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP190B (also known as 190.2)

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
1257.0	GP2 Gluten Truck Loadout Bin	32 tons of gluten per hour	Bin Vent Filter (CE1257-1)-East Gluten Receiver Bin Vent Dust Collector

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-340	Amend VOC Limit	None	02/08/18

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for EP190B shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	0.009[3]	NA	0.1 gr/dscf[1]	23.4(7)
PM_{10}	0.009[3,4]	NA	NA	NAAQS
$PM_{2.5}$	0.002[5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	23.3(2)"d"
Sulfur Dioxide (SO_2)	0.005[8]	NA	5.0 $ppm_{v,d}$[1,9]	RACT
Volatile Organic Compounds (VOC)	NA	NA	14.8 $ppm_{v,d}$[1,9]	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit maintains Projects 92-120 and 01-169 as minor projects for the purposes of PSD review.
4. The limit for PM_{10} emissions is established to correspond to the emission rate used in the dispersion modeling required by the consent decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV016788, Iowa District Court in and for Muscatine County (July 17, 2006)].
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
8. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
9. The limits for SO_2 and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

2. Compliance Demonstration(s) (continued)

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	77 Feet
Discharge Style	Horizontal Discharge
Stack Outlet Dimensions (inches)	6 inch Diameter
Exhaust Temperature (°F)	70 °F
Exhaust Flowrate (scfm)	100 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall conduct visible emissions observation on emission point (EP190B) once per calendar day.

i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from EP190B, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.

B. The owner or operator shall develop an operating and maintenance plan for the Bin Vent Filter (CE1257-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bin Vent Filter (CE1257-1).

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

12. Notification, Reporting, and Recordkeeping (Continued)

(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
02-A-782	01-169	"As-built" Permit	10/17/02	Yes
02-A-782-S1	11-297	Add PM_{10} NAAQS Emission Limit and Modify Stack Characteristics	05/17/02	No
02-A-782-S2	15-051	Establish $PM_{2.5}$ & SO_2 limit	07/06/15	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 10-A-563-S2

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

(563) 264-4569
Mick.durham@grainprocessing.com

Responsible Party:
Ron Zitzow
Senior VP of Operations

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP196.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
EU1263.0	DH4 and DH5 Rotary Dryers' Product Receiver Cyclone	52.8 tons of dry feed per hour	DHWHSE Bypass Baghouse (CE1263-2)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
16-485	Modify $PM_{2.5}$ emission rate, temperature, exhaust flow rate; correct max. capacity	No	07/25/17

Under the Direction of the Director of the
Department of Natural Resources

[JJC]

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PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.61[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
PM_{10}	0.61[3,4]	NA	NA	NAAQS
$PM_{2.5}$	0.175[3,5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	0.42[3,8]	NA	500 ppm_v	RACT and 567 IAC 23.3(3)"e"

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] Requested emission limits maintain projects 10-713 and 10-555 below PSD significance rates for PM, PM10, PM2.5, and SO2.
[4] The limit for PM_{10} emissions is established to correspond to the emission rate used in the dispersion modeling required by the consent decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV016788, Iowa District Court in and for Muscatine County (July 17, 2006)].
[5] The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
[6] The emission limit is a six (6) minute average.
[7] An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
[8] The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

2. Compliance Demonstration(s) (Continued)

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

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3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	82.67 Feet
Discharge Style	Vertical, unobstructed
Stack Outlet Dimensions (inches)	22 inches
Exhaust Temperature (^{o}F)	113°F
Exhaust Flowrate (scfm)	11,672 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

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4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emissions unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The Bypass Baghouse's (CE1263-2) differential pressure drop shall be maintained between 0.3 and 6 inches water column.

B. The owner or operator shall properly operate and maintain equipment to continuously monitor the differential pressure drop across the Bypass Baghouse (CE1263-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

C. The owner or operator shall collect and record the pressure drop across the Bypass Baghouse (CE1263-2), in inches of water, continuously. If the pressure drop across the Bypass Baghouse (CE1263-2) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Bypass Baghouse (CE1263-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Bypass Baghouse (CE1263-2) is not in operation.

D. The owner or operator shall develop an operating and maintenance plan for the Bypass Baghouse (CE1263-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bypass Baghouse (CE1263-2).

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
10-A-563	10-555	Original Permit	12/10/10	No
10-A-563-S1	15-050	Add PM2.5 and SO2 emission limits	12/10/15	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 15-A-200-S1

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

(563) 264-4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

Permitted Equipment

Emission Point ID: EP200N

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
See Condition 3	North Steep House – see Condition 3	Process Design Capacity of 75,000 bushels corn per day; See Condition 3	Spray Chamber Scrubber (CE2810-1)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-028	Add Additional Emission Units to Scrubber; Add PM, PM_{10}, $PM_{2.5}$ emission limits; Modify Stack Characteristics	Yes	04/12/18

Under the Direction of the Director of the
Department of Natural Resources

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PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.23[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
PM_{10}	0.23[3]	NA	NA	NA
$PM_{2.5}$	0.23[3,4]	NA	NA	NAAQS
Opacity	NA	NA	40%[5,6]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	2.80[7]	NA	500 ppm_v	RACT, 567 IAC 23.3(3)"e"
Volatile Organic Compounds (VOC)	2.10[3]	NA	NA	NA

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] Limits restrict potential to emit below PSD significance levels, and Project 17-028 is considered a minor modification for the purposes of PSD.
[4] The emission limit used in facility wide $PM_{2.5}$ dispersion modeling analysis that indicates predicted attainment of the $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS).
[5] The emission limit is based on a six (6) minute average.
[6] An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
[7] The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Test	One Time	2 hours	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Performance Test[1]	One Time	2 hours	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	Performance Test[1]	One Time	2 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Performance Test	Once Every 3 Calendar Years[2]	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	Performance Test	One Time	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

[1] It is acceptable to test for PM and to assume that all PM emissions are PM_{10} and $PM_{2.5}$ emissions.

[2] After the initial performance test, performance testing for SO_2 shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the SO_2 emission limit in Condition 1, the owner or operator may request to modify the performance testing frequency for SO_2.

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall verify compliance with the emission limitations contained in Permit Condition 1 within one hundred and eighty (180) days after installation of the Spray Chamber Scrubber (CE2810-1) is completed.

2. Compliance Demonstration(s) (Continued)

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

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3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	90 Feet
Discharge Style	Vertical, unobstructed
Stack Outlet Dimensions (inches)	46 inches
Exhaust Temperature (^{o}F)	125°F
Exhaust Flowrate (scfm)	19,405 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

The following emission units are vented directly or indirectly through this emission point:

EU ID	Description	Maximum Rated Capacity
EU2810.0 – EU2833.0	Corn Wet Mill Steep Tanks 1-24	3050 Bushels corn (each tank)
EU2834.0 – EU2839.0	Corn Wet Mill Steep Tanks 25-30	4550 Bushels corn (each tank)
EU2895.1	#1 and #2 Wet Mill Grind Bins	40 tons corn per hour (each bin)
EU2896.1	#6 Wet Mill Grind Bin	40 tons corn per hour
EU2895.11, EU2895.12	Set 1 – Grind Tank #1 and Tank #2	40 tons corn per hour (each tank)
EU2895.21, EU2895.22	Set 2 – Grind Tank #1 and Tank #2	40 tons corn per hour (each tank)
EU2895.61, EU2895.62	Set 6 – Grind Tank #1 and Tank #2	40 tons corn per hour (each tank)

EU ID	Description	Maximum Rated Capacity
EU2899.1, EU2899.3, EU2899.4	Wet Mill Germ Presses #1&#2, #3, #4	100 tons wet corn per hour (each press)
EU2899.5	Wet Mill Germ Press #5	138 tons wet corn per hour
EU2896.1	Small Reels Tank	100 tons corn per hour
EU2896.2	120 Degree Tank	100 tons corn per hour
EU2896.3	Big Reels Tank	100 tons corn per hour
EU2896.4	60 Degree Tank	100 tons corn per hour
EU2896.5	Steepwater Tank	360,000 gallon storage capacity
EU2801.1	West Double Runner Tanks	100 tons corn per hour
EU2898.1	North Wet Corn Drag Vent Fan	75,000 bushels per day
EU2898.4	Wet Germ Hopper Vent Fan	100 tons corn per hour

4. Federal Standards

A. New Source Performance Standards (NSPS):

These emission units are not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

These emission units are not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The Spray Chamber Scrubber (CE2810-1) shall be installed by December 31, 2017 to control SO_2 emissions from the emission units covered by this construction permit.

   i. The owner or operator shall maintain a record of the completion date for the installation of the Spray Chamber Scrubber (CE2810-1).

B. Sodium bisulfite ($NaHSO_3$) shall be used as a steeping additive for the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0). Prior to using any other steeping additive as a substitute for sodium bisulfite in the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0), the owner or operator shall apply for, and obtain, a modification to this construction permit.

C. The concentration of sodium bisulfite in the solution added to the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0) shall not exceed 42% by weight.

   i. The owner or operator shall maintain a record of a Safety Data Sheet or other supplier information that shows the weight percent of sodium bisulfite in the liquid solution added to the steeping tanks.

D. The amount of sodium bisulfite added on a wet basis to the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0) shall not exceed 0.40 pounds per bushel of corn on a monthly basis.

i. The owner or operator shall maintain the following daily records for the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0):

a. The total amount of sodium bisulfite added on a wet basis to the tanks, in pounds; and

b. The total amount of corn loaded into the tanks, in bushels.

ii. For the Corn Wet Milling Steeping Tanks 1-62 (EU2810.0 – EU2871.0), the owner or operator shall calculate and record for each calendar month the amount of sodium bisulfite added on a wet basis per bushel of corn (pounds $NAHSO_3$ per bushel).

E. All emission units specified in Condition 3 of this permit shall be enclosed so that SO_2 emissions are captured and vented to the control system. At a minimum, the enclosure shall meet Conditions E.i. through E.iii. for the emission units covered by this permit.

i. Each emission unit is enclosed at all times during its operation except for process inspections and testing.

ii. Access lids or hatches shall be maintained in good condition and shall completely cover equipment openings. The lids and hatches shall be closed except for periods of process inspections and testing.

iii. The capture system shall be maintained under negative pressure at all times; i.e. the direction of air flow through any opening shall be into the capture system at all times.

F. The owner or operator shall develop and implement an operating and monitoring plan to ensure SO_2 emissions are captured and vented to the control system at all times during operation. The owner or operator may update the facility's existing operating and monitoring plan to satisfy this requirement. The plan shall include, at a minimum, the following:

i. Operators Training Plan: A plan that includes training of operators on the proper function of the equipment's enclosure system and on how to identify and correct deficiencies.

ii. Periodic Inspection Plan: A plan for periodic inspections of the equipment, enclosures and capture system to ensure proper operation. The inspection may be done by portable sampling equipment or by other methods developed by the owner or operator. The plan shall include all records related to periodic inspection such as date, inspection method, and results.

iii. Corrective Action Plan: A plan that details corrective action(s) that shall be made to the equipment, enclosure, or capture system if the system is not properly capturing SO_2 emissions. The plan shall include all records related to any corrective actions taken.

G. The total flowrate of the Spray Chamber Scrubber (CE2810-1) liquor shall be maintained at or above 1000 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE2810-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE2810-1), in gallons per minute. If the liquor flow rate to the Spray Chamber Scrubber (CE2810-1) falls below the value specified in Condition 5G, the owner or operator shall investigate the Spray Chamber Scrubber (CE2810-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2810-1) is not in operation.

H. The pH range of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-1) shall be maintained between 5 and 8.

i. The owner or operator shall properly operate and maintain equipment to monitor the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-1) continuously. If the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-1) falls outside the range specified in Condition 5H, the owner or operator shall investigate the Spray Chamber Scrubber (CE2810-1) and make corrections to them. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2810-1) are not in operation.

I. The owner or operator shall develop an operating and maintenance plan for the Spray Chamber Scrubber (CE2810-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

a. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Spray Chamber Scrubber (CE2810-1).

J. No later than sixty (60) days after Wet Mill Bins #1, #2, #3, #4, #5, #6 (EU2895.1, EU2895.2, EU2895.3, EU2895.4, EU2895.5, EU2985.6) are connected to Spray Chamber Scrubber (CE2810-1) and Spray Chamber Scrubber (CE2810-2), the owner or operator shall submit a letter to the Department requesting that air construction permit 15-A-209 (EP279.0) be rescinded.

K. No later than sixty (60) days after the Wet Mill Steepwater Tank is connected to Spray Chamber Scrubber (CE2810-1), the owner or operator shall submit a letter to the Department requesting that air construction permit 15-A-202 (EP264.0) be rescinded.

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E. 9th Street Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
		Wet Mill Steep Tanks (EU2810.0 – EU2839.0)		
15-A-200	16-028	Permit Units to limit SO2 emissions	03/25/16	Yes
		Wet Mill Bins (EU2895.1 – EU2895.6)		
15-A-209	15-050	Permit Units to limit SO2 emissions; add scrubber	12/10/15	Yes
		Steep Water Tank (EU2896.0)		
15-A-202	15-050	Permit Unit to limit SO_2	12/10/15	No

END OF PERMIT

Air Quality Construction Permit

Permit Number: 15-A-201-S1

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

(563) 264-4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

Permitted Equipment

Emission Point ID: EP200S

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
See Condition 3	South Steep House – see Condition 3	Process Design Capacity of 101,000 bushels corn per day; See Condition 3	Spray Chamber Scrubber (CE2810-2)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-028	Add Additional Emission Units to Scrubber; Add PM, PM_{10}, $PM_{2.5}$ emission limits; Modify Stack Characteristics	Yes	04/12/18

Under the Direction of the Director of the
Department of Natural Resources

[JJC]

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PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.22[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
PM_{10}	0.22[3]	NA	NA	NA
$PM_{2.5}$	0.22[3,4]	NA	NA	NAAQS
Opacity	NA	NA	40%[5,6]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	3.17[7]	NA	500 ppm_v	RACT, 567 IAC 23.3(3)"e"
Volatile Organic Compounds (VOC)	2.20[3]	NA	NA	NA

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] Limits restrict potential to emit below PSD significance levels, and Project 17-028 is considered a minor modification for the purposes of PSD.
[4] The emission limit used in facility wide $PM_{2.5}$ dispersion modeling analysis that indicates predicted attainment of the $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS).
[5] The emission limit is based on a six (6) minute average.
[6] An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
[7] The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Test	One Time	2 hours	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Performance Test[1]	One Time	2 hours	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	Performance Test[1]	One Time	2 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Performance Test	Once Every 3 Calendar Years[2]	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	Performance Test	One Time	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

[1] It is acceptable to test for PM and to assume that all PM emissions are PM_{10} and $PM_{2.5}$ emissions.

[2] After the initial performance test, performance testing for SO_2 shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the SO_2 emission limit in Condition 1, the owner or operator may request to modify the performance testing frequency for SO_2.

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall verify compliance with the emission limitations contained in Permit Condition 1 within one hundred and eighty (180) days after installation of the Spray Chamber Scrubber (CE2810-2) is completed.

2. Compliance Demonstration(s) (Continued)

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

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3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	90 Feet
Discharge Style	Vertical, unobstructed
Stack Outlet Dimensions (inches)	46 inches
Exhaust Temperature (^{o}F)	125°F
Exhaust Flowrate (scfm)	18,120 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

The following emission units are vented directly or indirectly through this emission point:

EU ID	Description	Maximum Rated Capacity
EU2840.0 – EU2851.0	Corn Wet Mill Steep Tanks 31-42	4550 Bushels corn (each tank)
EU2852.0 – EU2859.0_	Corn Wet Mill Steep Tanks 43-50	6700 Bushels corn (each tank)
EU2860.0 – EU2867.0	Corn Wet Mill Steep Tanks 51-58	4550 Bushels corn (each tank)
EU2868.0 – EU2871.0	Corn Wet Mill Steep Tanks 59-62	6700 Bushels corn (each tank)
EU2895.3	#3 Wet Mill Grind Bin	40 tons corn per hour
EU2895.4	#4 Wet Mill Grind Bin	40 tons corn per hour
EU2895.5	#5 Wet Mill Grind Bin	40 tons corn per hour

EU ID	Description	Maximum Rated Capacity
EU2895.31, EU2895.32	Set 3 – Grind Tank #1 and Tank #2	40 tons corn per hour (each tank)
EU2895.41, EU2895.42	Set 4 – Grind Tank #1 and Tank #2	40 tons corn per hour (each tank)
EU2895.51, EU2895.52	Set 5 – Grind Tank #1 and Tank #2	40 tons corn per hour (each tank)
EU2896.6	Surge Tank	290 gallons per minute
EU2801.2	East Double Runner Tanks	135 tons corn per hour
EU2898.2	South Wet Corn Drag Vent Fan	101,000 bushels corn per day

4. Federal Standards

A. New Source Performance Standards (NSPS):

These emission units are not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

These emission units are not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The Spray Chamber Scrubber (CE2810-2) shall be installed by January 31, 2018 to control SO_2 emissions from the emission units covered by this construction permit.

   i. The owner or operator shall maintain a record of the completion date for the installation of the Spray Chamber Scrubber (CE2810-2).

B. Sodium bisulfite ($NaHSO_3$) shall be used as a steeping additive for the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0). Prior to using any other steeping additive as a substitute for sodium bisulfite in the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0), the owner or operator shall apply for, and obtain, a modification to this construction permit.

C. The concentration of sodium bisulfite in the solution added to the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0) shall not exceed 42% by weight.

   i. The owner or operator shall maintain a record of a Safety Data Sheet or other supplier information that shows the weight percent of sodium bisulfite in the liquid solution added to the steeping tanks.

D. The amount of sodium bisulfite added on a wet basis to the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0) shall not exceed 0.40 pounds per bushel of corn on a monthly basis.

   i. The owner or operator shall maintain the following daily records for the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0):

      a. The total amount of sodium bisulfite added on a wet basis to the tanks, in pounds; and

      b. The total amount of corn loaded into the tanks, in bushels.

   ii. For the Corn Wet Milling Steeping Tanks 1-62 (EU2810.0 – EU2871.0), the owner or operator shall calculate for each calendar month the amount of sodium bisulfite added on a wet basis per bushel of corn (pounds $NAHSO_3$ per bushel).

E. All emission units specified in Condition 3 of this permit shall be enclosed so that SO_2 emissions are captured and vented to the control system. At a minimum, the enclosure shall meet Conditions E.i. through E.iii. for the emission units covered by this permit.

i. Each emission unit is completely enclosed at all times during its operation except for process inspections and testing.

ii. Access lids or hatches shall be maintained in good condition and shall completely cover equipment openings. The lids and hatches shall be closed except for periods of process inspections and testing.

iii. The capture system shall be maintained under negative pressure at all times; i.e. the direction of air flow through any opening shall be into the capture system at all times.

F. The owner or operator shall develop and implement an operating and monitoring plan to ensure SO_2 emissions are captured and vented to the control system at times during operation. The owner or operator may update the facility's existing operating and monitoring plan to satisfy this requirement. The plan shall include, at a minimum, the following:

i. Operators Training Plan: A plan that includes training of operators on the proper function of the equipment's enclosure system and on how to identify and correct deficiencies.

ii. Periodic Inspection Plan: A plan for periodic inspections of the equipment, enclosures and capture system to ensure proper operation. The inspection may be done by portable sampling equipment or by other methods developed by the owner or operator. The plan shall include all records related to periodic inspection such as date, inspection method, and results.

iii. Corrective Action Plan: A plan that details corrective action(s) that shall be made to the equipment, enclosure or capture system if the system is not operating properly capturing SO_2 emissions. The plan shall include all records related to any corrective actions taken.

G. The total flowrate of the Spray Chamber Scrubber (CE2810-2) liquor shall be maintained at or above 1000 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE2810-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE2810-2), in gallons per minute. If the liquor flow rate to the Spray Chamber Scrubber (CE2810-1) falls below the value specified in Condition 5G, the owner or operator shall investigate the Spray Chamber Scrubber (CE2810-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2810-2) is not in operation.

H. The pH range of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-2) shall be maintained between 5 and 8.

i. The owner or operator shall properly operate and maintain equipment to monitor the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-2) continuously. If the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-2) falls outside the range specified in Condition 5H, the owner or operator shall investigate the Spray Chamber Scrubber (CE2810-2) and make corrections to them. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2810-2) are not in operation.

I. The owner or operator shall develop an operating and maintenance plan for the Spray Chamber Scrubber (CE2810-2) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

   i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Spray Chamber Scrubber (CE2810-2).

J. No later than sixty (60) days after Wet Mill Bins #1, #2, #3, #4, #5, #6 (EU2895.1, EU2895.2, EU2895.3, EU2895.4, EU2895.5, EU2985.6) are connected to Spray Chamber Scrubber (CE2810-1) and Spray Chamber Scrubber (CE2810-2), the owner or operator shall submit a letter to the Department requesting that air construction permit 15-A-209 (EP279.0) be rescinded.

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

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11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
(1) Per 567 IAC 22.3(3)“b”:
(a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.

(b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.

(2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
   (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
   (b) At least seven (7) days before equipment relocation.

(3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
   - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.

(4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
   - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

   If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:

(1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.

(2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.

(3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.

(4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E. 9th Street Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
		Wet Mill Steep Tanks (EU2840.0 – EU2871.0)		
15-A-200	16-028	Permit Units to limit SO_2 emissions	03/25/16	Yes
		Wet Mill Bins (EU2895.1 – EU2895.6)		
15-A-209	15-050	Permit Units to limit SO_2 emissions; add scrubber	12/10/15	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 17-A-298

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director Environmental Services

(563) 264-4569
mick.durham@grainprocessing.com

Responsible Party:
Ron Zitzow
Senior VP of Operations

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP296.0 (North)

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
2801.0	#1 Wet Germ Transfer System with Product Recovery Cyclone (CE2801-1)	6.65 tons/hr dry germ	See Condition 3
2802.0	#1 Germ Dryer (North Top) with Product Recovery Cyclone (CE2802-1)	6.65 tons/hr dry germ	
2802.1	#2 Germ Dryer (North Bottom) with Product Recovery Cyclone (CE2802-1)	13.3 tons/hr dry germ	

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-028	Combine EP14.0 and EP15.0; Install New Scrubber	Yes	04/12/18

Under the Direction of the Director of the
Department of Natural Resources

[JJC]

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PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.96[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
PM_{10}	0.96[4]	NA	NA	NA
$PM_{2.5}$	0.60[4,5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	3.8[8]	NA	500 ppm_v	RACT, 567 IAC 23.3(3)"e"
Volatile Organic Compounds (VOC)	9.6[9,10]	NA	NA	NA

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] The PM emission limit maintains emission limits established for EU2802.0 (Dryer #1) and EU2802.1 (Dryer #2) in projects 79-222 and 79-265 to keep projects minor for LAER.
[4] The limits restrict potential to emit below PSD significance levels, and Project 17-028 is considered a minor modification for the purposes of PSD.
[5] The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
[6] The emission limit is based on a six (6) minute average.
[7] An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
[8] The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
[9] VOC emission limit established to maintain project 17-028 below significant net emissions increase for purposes of PSD review.
[10] Requested emission limit maintains project 17-028 (#1 Germ Transfer, #1 Germ Dryer, #2 Germ Dryer (EU2801.0, EU2802.0, EU2802.1)) below PSD significance rate.

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Test	Once Every 3 Calendar Years[1]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Performance Test[2]	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	Performance Test[3]	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Performance Test	Once Every 3 Calendar Years[1]	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

[1] After the initial performance test, performance testing for PM, PM_{10}, $PM_{2.5}$, and SO_2 shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM_{10}, $PM_{2.5}$, and SO_2 emission limits in Condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM_{10}, $PM_{2.5}$, opacity, and SO_2.

[2] It is acceptable to test for PM and to assume that all PM emissions are PM_{10} emissions.

2. Compliance Demonstration(s) (Continued)

[3] If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the $PM_{2.5}$ limit as specified in Condition 10 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable $PM_{2.5}$ fraction shall be determined by conducting internal particle sizing of the dried germ product (immediately following the dryer) to determine the $PM_{2.5}$ fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered $PM_{2.5}$.

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 by no later than one hundred and eighty (180) days after the issuance date of this permit. The previous performance test was conducted on November 30, 2017.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	90 Feet
Discharge Style	Vertical, unobstructed
Stack Outlet Dimensions (inches)	42 inches
Exhaust Temperature (°F)	160°F
Exhaust Flowrate (scfm)	12,170 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

The following emission units and control equipment are vented directly or indirectly through this emission point:

Emission Unit Description	Control Equipment	
#1 Wet Germ Transfer System with Product Recovery Cyclone (EU 2801.0)	Venturi Scrubber w/ Mist Eliminator (CE2802-2)	Spray Chamber Scrubber (CE2802-3)
#1 Germ Dryer (North Top) with Product Recovery Cyclone (EU 2802.0)		
#2 Germ Dryer (North Bottom) with Product Recovery Cyclone (EU 2802.1)		

4. Federal Standards

A. New Source Performance Standards (NSPS):

These emission units are not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

These emission units are not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The total flowrate of the Venturi Scrubber's (CE2802-2) liquor shall be maintained at or above 130 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Venturi Scrubber (CE2802-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Venturi Scrubber (CE2802-2), in gallons per minute. If the liquor flow rate to the Venturi Scrubber (CE2802-2) falls below the value specified in Condition 5A, the owner or operator shall investigate the Venturi Scrubber (CE28402-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2802-2) is not in operation.

B. The differential pressure drop across the Venturi Scrubber (CE2802-2) shall be maintained between 11 and 20 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Venturi Scrubber (CE2802-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall continuously collect and record the pressure drop across the Venturi Scrubber (CE2802-2), in inches of water column. If the pressure drop across the Venturi Scrubber (CE2802-2) falls outside the range specified in Condition 5B., the owner or operator shall investigate the Venturi Scrubber (CE2802-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2802-2) is not in operation.

C. The pH range of the scrubbing liquor in the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber shall be maintained between 5 and 8.

i. The owner or operator shall properly operate and maintain equipment to monitor the pH of the scrubbing liquor in the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pH of the scrubbing liquor for the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) continuously. If the pH of the scrubbing liquor in the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) falls outside the range specified in Condition 5C., the owner or operator shall investigate the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) and make corrections to them. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) are not in operation.

D. The total flowrate of the Spray Chamber Scrubber (CE2802-3) liquor shall be maintained at or above 600 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE2802-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE2802-3), in gallons per minute. If the liquor flow rate to the Spray Chamber Scrubber (CE2802-3) falls below the value specified in Condition 5D, the owner or operator shall investigate the Spray Chamber Scrubber and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2802-3) is not in operation.

E. The owner or operator shall develop an operating and maintenance plan for the cyclones (CE2801-1 and CE2802-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the cyclones (CE2801-1 and CE2802-1).

F. The owner or operator shall develop an operating and maintenance plan for the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3).

G. No later than sixty (60) days after the issuance date of construction permit 17-A-298, the owner or operator shall submit a letter to the Department requesting that air construction permits 15-A-078 (EP14.0) and 79-A-194-S2 (EP15.0) be rescinded.

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.

(4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E. 9th Street Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
		#1 Wet Germ Transfer System (EU2801.0)		
15-A-078	15-050	Establish PM, PM_{10}, $PM_{2.5}$ and SO_2 Emission Limits for a Grandfathered Unit	12/10/15	Yes
		#1 and #2 Germ Dryers (EU2802.0, EU2802.1)		
79-A-194	79-265	Original Permit	08/17/79	No
79-A-194-S1	95-266	Add SO_2 Emission Limit	09/18/95	No
79-A-194-S2	15-050	Add PM_{10} and $PM_{2.5}$ Emission Limits; Add Scrubber; Modify SO_2 Limit; Modify EU Description	12/10/15	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 17-A-299

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director Environmental Services

(563) 264-4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior VP of Operations

Permitted Equipment

Emission Point ID: EP297.0 (South)

Emission Unit(s) and Control Equipment:

EU ID	Description	Process Design Capacity	Control Equipment Description and ID
2803.0	#2 Wet Germ Transfer System with Product Recovery Cyclone (CE2803-1)	6.65 tons/hr dry germ[1]	See Condition 3
2804.0	#3 Germ Dryer (South Top) with Product Recovery Cyclone (CE2804-1)	6.65 tons/hr dry germ[1]	
2807.0	#4 Germ Dryer (South Bottom) with Product Recovery Cyclone (CE2807-1)	13.3 tons/hr dry germ	

[1] Maximum rated capacity is 9.0 tons/hr, dry germ

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-028	Combine EP96.0, EP97.0, EP126.0; Install New Scrubber	Yes	04/12/18

Under the Direction of the Director of the
Department of Natural Resources

[JJC]

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PERMIT CONDITIONS

1a. Emission Limits – emission point EP297.0

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.58[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
PM_{10}	0.58[3]	NA	NA	NA
$PM_{2.5}$	0.48[3,4]	NA	NA	NAAQS
Opacity	NA	NA	40%[5,6]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	2.05[7]	NA	500 ppm_v	RACT, 567 IAC 23.3(3)"e"
Volatile Organic Compounds (VOC)	10.4[8,9]	NA	NA	NA

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] Limits restrict potential to emit below PSD significance levels, and Project 17-028 is considered a minor modification for the purposes of PSD.
[4] The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
[5] The emission limit is based on a six (6) minute average.
[6] An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
[7] The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
[8] VOC emission limit established to maintain project 17-028 below significant net emissions increase for purposes of PSD review.
[9] Requested emission limit maintains project 17-028 (#2 Germ Transfer, #3 Germ Dryer, #4 Germ Dryer (EU2803.0, EU2804.0, EU2807.0)) below PSD significance rate.

1b. Lowest Achievable Emission Rate (LAER) Emission Limits – Germ Dryer #4

The following emission limit shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference/Basis
Particulate Matter (PM) - State	0.42[3]	NA	NA	567 IAC 31.20(1)"d", LAER

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is a twelve (12) month rolling total.
[3] The PM emission limit maintains emission limits established for EU2807.0 (Dryer #4) in project 79-222 and 79-265 to keep the project minor for LAER.

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State: EP297.0	Performance Test	Once Every 3 Calendar Years[1]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM – State: EU2807.0, Dryer 4	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Performance Test[2]	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	Performance Test[3]	Once Every 3 Calendar Years[1]	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Performance Test	Once Every 3 Calendar Years[1]	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

[1] Performance testing for PM, PM_{10}, $PM_{2.5}$, and SO_2 shall be conducted once every 3 calendar years. A performance test was conducted on November 29, 2017. Therefore, the next performance test is required to be conducted by no later than November 29, 2020. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM_{10}, $PM_{2.5}$, and SO_2 emission limits in Condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM_{10}, $PM_{2.5}$, opacity, and SO_2.

[2] It is acceptable to test for PM and to assume that all PM emissions are PM_{10} emissions.

[3] If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the $PM_{2.5}$ limit as specified in Condition 10 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable $PM_{2.5}$ fraction shall be determined by conducting internal particle sizing of the dried germ product (immediately following the dryer) to determine the $PM_{2.5}$ fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered $PM_{2.5}$.

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 by no later than November 29, 2020. The previous performance test was conducted on November 29, 2017.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

2. Compliance Demonstration(s) (Continued)

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	90 Feet
Discharge Style	Vertical, unobstructed
Stack Outlet Dimensions (inches)	42 inches
Exhaust Temperature (°F)	160°F
Exhaust Flowrate (scfm)	13,800 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

The following emission units and control equipment are vented directly or indirectly through this emission point:

Emission Unit Description	Control Equipment	
#2 Wet Germ Transfer System with Product Recovery Cyclone (EU 2803.0)	Venturi Scrubber w/ Mist Eliminator (CE2804-2)	Spray Chamber Scrubber (CE2804-3)
#3 Germ Dryer (South Top) with Product Recovery Cyclone (EU 2804.0)		
#4 Germ Dryer (South Bottom) with Product Recovery Cyclone (EU 2807.0)		

4. Federal Standards

A. New Source Performance Standards (NSPS):

These emission units are not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

These emission units are not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The total flowrate of the Venturi Scrubber's (CE2804-2) liquor shall be maintained at or above 130 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Venturi Scrubber (CE2804-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Venturi Scrubber (CE2804-2), in gallons per minute. If the liquor flow rate to the Venturi Scrubber (CE2804-2) falls below the value specified in Condition 5A, the owner or operator shall investigate the Venturi Scrubber (CE28404-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2804-2) is not in operation.

B. The differential pressure drop across the Venturi Scrubber (CE2804-2) shall be maintained between 16 and 25 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Venturi Scrubber (CE2804-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall continuously collect and record the pressure drop across the Venturi Scrubber (CE2804-2), in inches of water column. If the pressure drop across the Venturi Scrubber (CE2804-2) falls outside the range specified in Condition 5B., the owner or operator shall investigate the Venturi Scrubber (CE2804-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2804-2) is not in operation.

C. The pH range of the scrubbing liquor in the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) shall be maintained between 5 and 8.

i. The owner or operator shall properly operate and maintain equipment to monitor the pH of the scrubbing liquor in the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pH of the scrubbing liquor for the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) continuously. If the pH of the scrubbing liquor in the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) falls outside the range specified in Condition 5C., the owner or operator shall investigate the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) and make corrections to them. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) are not in operation.

D. The total flowrate of the Spray Chamber Scrubber (CE2804-3) liquor shall be maintained at or above 590 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE2804-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE2804-3), in gallons per minute. If the liquor flow rate to the Spray Chamber Scrubber (CE2804-3) falls below the value specified in Condition 5D, the owner or operator shall investigate the Spray Chamber Scrubber (CE2804-3) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2804-3) is not in operation.

E. The owner or operator shall develop an operating and maintenance plan for the cyclones (CE2803-1, CE2804-1, CE2807-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the cyclones (CE2803-1, CE2804-1, and CE2807-1).

F. The owner or operator shall develop an operating and maintenance plan for the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3).

G. No later than sixty (60) days after the issuance date of construction permit 17-A-299, the owner or operator shall submit a letter to the Department requesting that air construction permits 74-A-014-S1 (EP96.0), 74-A-015-S2 (EP97.0), and 79-A-195-S2 (EP126.0) be rescinded.

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E. 9th Street Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
		#2 Wet Germ Transfer System (EU2803.0)		
74-A-014	74-017	Original Permit	01/16/74	No
74-A-014-S1	15-050	Add PM_{10}, $PM_{2.5}$ and SO_2 Emission Limits	12/10/15	Yes
		#3 Germ Dryer (EU2804.0)		
74-A-015	74-018	Original Permit	01/16/74	No
74-A-015-S1	95-266	Add SO_2 Emission Limit	09/18/95	No
74-A-015-S2	15-050	Add PM_{10} and $PM_{2.5}$ Emission Limits; Modify SO_2 Emission Limit; Add Scrubber; Re-identify EU	12/10/15	Yes
		#4 Germ Dryer (EU2807.0)		
79-A-195	79-222	Original Permit	08/17/79	Yes
79-A-195-S1	95-266	Add SO2 Emission Limit	09/18/95	No
79-A-195-S2	15-050	Add PM_{10} and $PM_{2.5}$ Emission Limits; Add Wet Scrubber; Modify SO_2 Limit; Re-identify EU	12/10/15	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 15-A-213-S2

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP 311.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
EU1236.0	Dryer House 4, Rotary Dryer #5	4.25 tons of dried feed per hour	See condition 3 for emission unit and control equipment list
EU1238.0	Dryer House 4, Rotary Dryer #6	6.65 tons of dried feed per hour	
EU1241.0	Dryer House 4, Rotary Dryer #7	6.65 tons of dried feed per hour	
See condition 3	Dryer House 4 Building Aspiration System	17.55 tons of dried feed per hour	

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
20-197	Amend PM2.5 Rate, Exhaust Flow & Temperature	Yes	12/22/20

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1a. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for EP311.0 shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	5.7[3]	NA	0.1 gr/dscf[1]	23.4(7)
PM_{10}	5.7[3,4]	NA	NA	NAAQS
$PM_{2.5}$	4.30[3,5, 10]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	23.3(2)"d"
Sulfur Dioxide (SO_2)	2.10[8,9]	NA	90% Control Efficiency or 10 $ppm_{v,d}$[1,10,11]	RACT
Volatile Organic Compounds (VOC)	NA	NA	98% Control Efficiency or 10 $ppm_{v,d}$[1,3, 10,12]	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit restricts potential PM, PM_{10}, $PM_{2.5}$ and VOC emission below PSD significance levels and Projects 15-087/17-159 are considered a minor modification for the purposes of PSD.
4. The emission limit used in facility wide PM_{10} dispersion modeling analysis that indicates predicted attainment of the PM_{10} National Ambient Air Quality Standards (NAAQS).
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
8. Limit restricts potential SO2 emissions below NA-NSR significance level and Project 15-087/17-159 are considered a minor modification for the purposes of NA-NSR.
9. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
10. The limit for $PM_{2.5}$, SO_2 and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].
11. Limit requires 90 percent control efficiency across Spray Chamber Scrubber (CE1236-2) and Spray Chamber Scrubber (CE1282-1) or SO2 concentration of 10 $ppm_{v,d}$ from the outlet of EP311.0. Compliance with limit shall be demonstrated by measuring the SO_2 concentration of the inlet and outlet and flowrate of Spray Chamber Scrubber (CE1236-2) and Spray Chamber Scrubber (CE1282-1) to determine control efficiency of each scrubber or measuring the outlet SO_2 concentration from EP311.0. Control efficiency is defined as $[\frac{\text{inlet m te} - \text{utlet m te}}{\text{inlet m te}}]\ x100$.
12. Limit requires 98 percent control efficiency across Regenerative Thermal Oxidizer (CE1236-3) or VOC concentration of 10 $ppm_{v,d}$ from the outlet of EP311.0. Compliance with limit shall be demonstrated by measuring the inlet and outlet VOC concentration and flowrate of Regenerative Thermal Oxidizer (CE1236-3) to determine control efficiency of Regenerative Thermal Oxidizer (CE1236-3) or measuring the outlet VOC concentration from EP311.0. Control efficiency is defined as $[\frac{\text{inlet m te} - \text{utlet m te}}{\text{inlet m te}}]\ x100$.

1b. Other Emission Limits

The following emission limits for DH4 Feed Dryer #5 (EU1236.0) shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	1.41[3]	NA	NA	31.20(1)"d", LAER
PM_{10}	NA	NA	NA	NA
$PM_{2.5}$	NA	NA	NA	NA
Opacity	NA	NA	NA	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit established when the Muscatine Area was designated non-attainment for TSP (PM). Any relaxation in the Lowest Achievable Emission Rates (LAER) after the Muscatine Area is redesignated attainment for TSP (PM) is subject to review under the PSD regulations in effect at the time the relaxation occurs.

The following emission limits for DH4 Feed Dryer #6 (EU1238.0) shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	NA	NA	0.1 gr/scf[3]	31.20(1)"d", LAER
PM_{10}	NA	NA	NA	NA
$PM_{2.5}$	NA	NA	NA	NA
Opacity	NA	NA	NA	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit established when the Muscatine Area was designated non-attainment for TSP (PM). Any relaxation in the Lowest Achievable Emission Rates (LAER) after the Muscatine Area is redesignated attainment for TSP (PM) is subject to review under the PSD regulations in effect at the time the relaxation occurs.

The following emission limits for DH4 Feed Dryer #7 (EU1241.0) shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	1.60[3]	NA	NA	NA
PM_{10}	NA	NA	NA	NA
$PM_{2.5}$	NA	NA	NA	NA
Opacity	NA	NA	NA	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit restricts potential PM emissions below the PSD significance level and maintains Projects 90-082 as minor for the purposes of PSD.

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Testing	Once Every 3 Calendar Years [1]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}[2]	Performance Testing	Once Every 3 Calendar Years [1]	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$[3]	Performance Testing	Once Every 3 Calendar Years [1]	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Performance Testing	Once Every 3 Calendar Years [1]	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	Performance Testing	Once per Calendar Year [4,5]	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

1 Performance testing for PM, PM_{10}, $PM_{2.5}$, and SO_2 shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with PM, PM_{10}, $PM_{2.5}$, and SO_2 emission limits as specified in condition 1a, the owner or operator may request to modify the performance testing frequency for PM, PM_{10}, $PM_{2.5}$, and SO_2. The next performance test for PM, PM_{10}, $PM_{2.5}$, and SO_2 shall be completed by December 31, 2023.

2 Performance testing may be conducted for total particulate matter to demonstrate compliance with PM_{10} limit as specified in permit condition 1a.

3 If performance testing using methods specified in 40 CFR 51, Appendix M, 201A with 202 are not performed due high moisture content (stack saturation) then the owner or operator shall demonstrate compliance with $PM_{2.5}$ limit as specified in permit condition 1a by conducting methods specified in 40 CFR 60, Appendix A, Method 5 and 40 CFR 51 Appendix M Method 202. Utilizing Method 5, the filterable $PM_{2.5}$ fraction shall be determined by conducting internal particle sizing of the dried feed product (immediately following the feed dryers) to determine the $PM_{2.5}$ fraction of the measured total filterable particulate. Utilizing Method 202, the measured condensable fraction shall be considered all $PM_{2.5}$.

4 Performance testing for VOC shall be conducted once per calendar year. After the completion of two consecutive performance tests that demonstrate compliance with VOC emission limits as specified in condition 1a, the owner or operator may request to modify the performance testing frequency for VOC. The next performance test for VOC shall be completed by December 31, 2021.

5 As alternative, the owner or operator may elect to demonstrate RTO control efficiency using test method 40 CFR 60, Appendix A, Method 25A.

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

2. Compliance Demonstration(s) (continued)

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

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3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	110 Feet
Discharge Style	Vertical Unobstructed Discharge
Stack Outlet Dimensions (inches)	64 inches Diameter
Exhaust Temperature (ºF)	333 °F
Exhaust Flowrate (scfm)	34,530 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

3. Emission Point Characteristics (continued)

The following emission unit and control equipment are vented directly or indirectly through this emission point:

Emission Unit Description	Control Equipment		
DH4 Rotary Dryer #5 (EU1236.0)	Expansion Chamber (CE1236-1)	TurboTak Spray Chamber Scrubber (CE1236-2)	Regenerative Thermal Oxidizer (CE1236-3), Maximum Heat Input: 12.0 MMBtu/hr with Low NOx Burners
DH4 Rotary Dryer #6 (EU1238.0)	Expansion Chamber (CE1238-1)		
DH4 Rotary Dryer #7 (EU1241.0)	Expansion Chamber (CE1241-1)		
Hulls Surry Tank Vent (EU1282.0)	Spray Chamber Scrubber (CE1282-1)		
East Thin Stillage Tank Vent (EU1285.0)			
West Thin Stillage Tank (EU1285.1)			
West C-400's Thus Tank (EU1285.2)			
East C-400's Thrus Tank (Now Oil Tank) (EU1285.3)			
R-2639-Emergency Syrup Tank (EU1285.4)			
12-B Whole Stillage Tank Vent (EU1283.0)			
MR2 Feed Tank (EU1284.1)			
MR2 Condensate Tank Vent (EU1284.2)			
MR2 Non Condensibles Vent (EU1284.3)			
#1 Alfa-Laval Decanter Centrifuge (EU1264.0)			
ME-1204-R2662-#6 Sharples Decanter Centrifuge (EU1264.8)			
ME-1204-R2663-#7 Sharples Decanter Centrifuge (EU1264.9)			
DH4 Conveyors (EU1286.0): Spent Germ Conveyor, Dry Ingredients Conveyor, Dry Ingredients Drag, #3 &#4 Sharples Discharge Screw Conveyors, #5 Rotary Product Conveyors #1 & 2, #7 &#8 C-400 Discharge Conveyors, #7 & #8 C-400 Cross Conveyors, Combined Feed Collection Conveyor, Inclined Mixing Conveyor, #5, #6 & #7 Rotaries Feed Conveyors, Overflow Drag #1, Rework Conveyors #1 & #2, #5, Combined Rotaries Product Conveyors #1 & #2, DH4 Mill Feed Draver Conveyor			

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

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5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

DH4, Rotary Dryer #5 (EU 1236.0)

A. The capacity of the DH4, Rotary Dryer #5 (EU 1236.0) is limited to 4.25 tons per hour of dry product.

B. The #5 Rotary Dryer Stub Feeder Conveyor speed shall not exceed 28.9 revolutions per minute (rpm) on a one (1) hour average which is 85% of the maximum conveyor speed of 34 rpm.

i. The owner or operator shall properly operate and maintain equipment to continuously monitor the #5 Rotary Dryer Stub Feeder Conveyor motor speed. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and calculate the #5 Rotary Dryer Stub Feeder Conveyor speed, in revolutions per minute, continuously. This requirement shall not apply on the days that DH4, Rotary Dryer #5 is not in operation.

iii. The owner or operator shall determine and track the hourly average #5 Rotary Dryer Stub Feeder Conveyer speed in revolutions per minute.

Control Equipment-Scrubbers

C. The Spray Chamber Scrubber (CE1236-2) total liquor flowrate shall be maintained at or above 55 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE1236-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE1236-2), in gallons per minute, continuously. If the total liquor flow rate to the Spray Chamber Scrubber (CE1236-2) falls below the value specified in Condition 5C, the owner or operator shall investigate the Spray Chamber Scrubber (CE1236-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE1236-2) is not in operation.

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

D. The pH range of the scrubbing liquor in Spray Chamber Scrubber (CE1236-2) shall be maintained between 5 and 8.

i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the Spray Chamber Scrubber (CE1236-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the scrubbing liquor pH in Spray Chamber Scrubber (CE1236-2), on a continuous basis. If the pH of the scrubbing liquor in Spray Chamber Scrubber (CE1236-2) falls outside the range specified in Condition 5D, the owner or operator shall investigate Spray Chamber Scrubber (CE1236-2) and make corrections to Spray Chamber Scrubber (CE1236-2). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Spray Chamber Scrubber (CE1236-2) is not in operation.

E. The Spray Chamber Scrubber (CE1282-1) total liquor flowrate shall be maintained at or above 165 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE1282-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE1282-1), in gallons per minute, continuously. If the total liquor flow rate to the Spray Chamber Scrubber (CE1282-1) falls below the value specified in Condition 5E, the owner or operator shall investigate the Spray Chamber Scrubber (CE1282-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE1282-1) is not in operation.

F. The pressure drop across Spray Chamber Scrubber (CE1282-1) shall be maintained between 0.1 to 5 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Spray Chamber Scrubber (CE1282-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across the Spray Chamber Scrubber (CE1282-1), in inches of water, continuously. If the pressure drop across the Spray Chamber Scrubber (CE1282-1) falls outside the range specified in Condition 5F, the owner or operator shall investigate the Spray Chamber Scrubber (CE1282-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE1282-1) is not in operation.

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

G. The pH range of the scrubbing liquor in Spray Chamber Scrubber (CE1282-1) shall be maintained between 5 and 8.

iii. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the Spray Chamber Scrubber (CE1282-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

iv. The owner or operator shall collect and record the scrubbing liquor pH in Spray Chamber Scrubber (CE1282-1), on a continuous basis. If the pH of the scrubbing liquor in Spray Chamber Scrubber (CE1282-1) falls outside the range specified in Condition 5G, the owner or operator shall investigate Spray Chamber Scrubber (CE1282-1) and make corrections to Spray Chamber Scrubber (CE1282-1). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Spray Chamber Scrubber (CE1282-1) is not in operation.

H. The owner or operator shall develop an operating and maintenance plan for Spray Chamber Scrubber (CE1236-2) and Spray Chamber Scrubber (CE1282-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Spray Chamber Scrubber (CE1236-2).
ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Spray Chamber Scrubber (CE1282-1).

Control Equipment-RTO

I. The owner or operator shall only bypass Regenerative Thermal Oxidizer (CE1236-3) for purposes of malfunction and/or maintenance for a maximum of 200 hours per twelve month rolling period.

i. The owner or operator shall record the total hours and the cause of Regenerative Thermal Oxidizer (CE1236-3) bypass on a monthly basis. The owner or operator shall calculate and record the rolling 12-month totals.

J. The owner or operator shall maintain a Regenerative Thermal Oxidizer (CE1236-3) combustion chamber temperature to no less than 1600 degrees Fahrenheit based on a 3-hour block average.

i. The owner or operator shall properly operate and maintain equipment to monitor the chamber temperature of Regenerative Thermal Oxidizer (CE1236-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the combustion chamber temperature of Regenerative Thermal Oxidizer (CE1236-3), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of Regenerative Thermal Oxidizer (CE1236-3) falls below the value specified in Condition 5I, the owner or operator shall investigate Regenerative Thermal Oxidizer (CE1236-3) and make corrections Regenerative Thermal Oxidizer (CE1236-3). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Regenerative Thermal Oxidizer (CE1236-3) is not in operation.

K. The owner or operator shall combust only natural gas or process off-gasses in Regenerative Thermal Oxidizer (CE1236-3).

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

L. The owner or operator shall develop an operating and maintenance plan for the Regenerative Thermal Oxidizer (CE1236-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Regenerative Thermal Oxidizer (CE1236-3).

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

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11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (b) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (c) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

12. Notification, Reporting, and Recordkeeping (Continued)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E 9th Street Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

EP311.0 (Dryer House 4 Rotary Dryer #5, Rotary Dryer #6, Rotary Dryer #7 & Building Aspiration System)
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Permit No.	Project No.	Description	Date	Stack Testing
15-A-213	15-087	Merge Stacks EP127, EP137, EP164, Add Scrubber, Add RTO, PM2.5 & SO2 limits	01/21/16	Yes
15-A-213-S1	17-159	Add DH4 Building Aspiration System, Amend PM2.5 Limit & Parametric Monitoring	04/05/18	Yes

14. Permit History (continued)

Dryer House 4 Rotary Dryer #5 (EP127.0)

Permit No.	Project No.	Description	Date	Stack Testing
09-A-707	09-317	Replace Rotary Dryer #5, previously permitted under 80-A-112	12/23/09	No
09-A-707-S1	10-501	Amended recordkeeping.	03/09/11	No

Dryer House 4 Rotary Dryer #6 (EP137.0)

Permit No.	Project No.	Description	Date	Stack Testing
85-A-033	85-032	Original Permit	03/26/85	Yes

Dryer House 4 Rotary Dryer #7 (EP164.0)

Permit No.	Project No.	Description	Date	Stack Testing
90-A-264	90-082	Original Permit	08/30/90	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 15-A-486-S1

Plant Number: 70-01-004

Company:

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP 314.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
1281.5	GP2: No 5 Gluten Filter	0.86 tons of gluten cake per hour	None
1281.6	GP2: No. 6 Gluten Filter	0.86 tons of gluten cake per hour	None
1281.7	GP2: No.7 Gluten Filter	0.86 tons of gluten cake per hour	None
1281.8	GP2: No.8 Gluten Filter	0.86 tons of gluten cake per hour	None

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-198	Add New Gluten Filter No. 8	None	11/04/19

Under the Direction of the Director of the
Department of Natural Resources

[PZ]

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PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Sulfur Dioxide (SO_2)	0.27[3,4]	NA	500 ppm_v[1]	RACT, 23.3(3)"e"
Volatile Organic Compounds (VOC)	NA	NA	NA	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is based on a twelve (12) month rolling total.
3. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
4. Limit restricts potential SO2 emissions below NA-NSR significance level and Project 17-198 is considered a minor modification for the purposes of NA-NSR.

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
SO_2	Performance Testing	NA	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	Performance Testing	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

2. Compliance Demonstration(s) (Continued)

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

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3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	65 Feet
Discharge Style	Horizontal Discharge
Stack Outlet Dimensions (inches)	24 inch Diameter
Exhaust Temperature (^{o}F)	81 ^{o}F
Exhaust Flowrate (scfm)	5430 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

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4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

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5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. This permit does not establish operating, monitoring and recordkeeping requirements on these emission units at this time.

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

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11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

12. Notification, Reporting, and Recordkeeping (continued)

Air Quality Bureau Iowa Department of Natural Resources 502 E. 9th St. Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
15-A-346	15-362	Permit Units to Limit SO2 Emissions	02/15/16	None

END OF PERMIT

Air Quality Construction Permit

Permit Number: 15-A-326-S1

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP 315.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Maximum Process Design Rate	Control Equipment Description and ID
2874.0	#5 Wet Mill Germ Dryer with Product Recovery Cyclone (CE2874-1)	10 tons of dried germ per hour	9.0 tons of dried germ per hour	Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2)
2894.0	#3 Germ Transfer and Receiver with Product Recovery Cyclone (CE2894-1)	28 tons of wet germ per hour	NA	

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
18-024	Amend Limits and Establish Operating Parameters	Yes	03/04/20

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for EP315.0 shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	1.40[3]	NA	0.1 gr/dscf[1]	23.4(7)
PM_{10}	1.40[4]	NA	NA	NAAQS
$PM_{2.5}$	0.50[5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	23.3(2)"d"
Sulfur Dioxide (SO_2)	0.70[8]	NA	90% Control Efficiency or 10 $ppm_{v,d}$[1,9,10]	RACT
Volatile Organic Compounds (VOC)	NA	NA	130 $ppm_{v,d}$[1,9]	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Requested limit maintains project 91-097 as minor project for PSD purposes.
4. The emission limit used in facility wide PM_{10} dispersion modeling analysis that indicates predicted attainment of the PM_{10} National Ambient Air Quality Standards (NAAQS).
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
8. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
9. The limit for SO2 and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)] as amended on March 26, 2019.
10. Limit requires 90 percent control efficiency across Scrubbing System (CE2874-2) or SO_2 concentration of 10 $ppm_{v,d}$ from the outlet of EP315.0. Compliance with limit shall be demonstrated by measuring the inlet and outlet SO_2 concentration and flowrate of Scrubbing System (CE2874-2) to determine control efficiency of Scrubbing System (CE2874-2) or measuring the outlet SO_2 concentration from EP315.0. Control efficiency is defined as $[\frac{\text{inlet mass rate} - \text{outlet mass rate}}{\text{inlet mass rate}}] \, x100.$

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Testing	Once Every 3 Calendar Years [1,4]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}[2]	Performance Testing	Once Every 3 Calendar Years [1,4]	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$[3]	Performance Testing	Once Every 3 Calendar Years [1,4]	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Performance Testing	Once Every 3 Calendar Years [1,4]	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

1 Performance testing for PM, PM_{10}, $PM_{2.5}$, and SO_2 shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with PM, PM_{10}, $PM_{2.5}$, and SO_2 emission limits as specified in condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM_{10}, $PM_{2.5}$, and SO_2.

2 Performance testing may be conducted for total particulate matter to demonstrate compliance with PM_{10} and $PM_{2.5}$ limits as specified in permit condition 1.

3 If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the $PM_{2.5}$ limit as specified in Condition 10 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable $PM_{2.5}$ fraction shall be determined by conducting internal particle sizing of the dried germ product (immediately following the dryer) to determine the $PM_{2.5}$ fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered $PM_{2.5}$.

4 The last performance test was conducted on 12/12/18. The next performance test shall be conducted by December 31, 2021.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

2. Compliance Demonstration(s) (continued)

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	90 Feet
Discharge Style	Vertical Unobstructed Discharge
Stack Outlet Dimensions (inches)	40 inches Diameter
Exhaust Temperature (°F)	160 °F
Exhaust Flowrate (scfm)	12,500 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

#5 Germ Dryer (EU2874.0)

A. The #5 Germ Dryer (EU2874.0) is limited to a maximum operating capacity of 9 tons of dried germ per hour.

i. The owner or operator shall maintain an interlock system on #5 Germ Dryer conveyors to ensure that #5 Germ Dryer cannot operate alone but must operate with either #1, #2, # 3, or #4 Germ Dryers at all times.

ii. The owner or operator shall continuously monitor operation of each germ dryer to ensure that #5 Germ Dryer is operating in conjunction with either #1, #2, # 3, or #4 Germ Dryers at all times.

iii. The owner or operator shall operate a variable speed drive on the germ feed screw conveyor to # 5 Germ Dryer so that motor on #5 Germ Dryer does not operate no more than 54 Hertz.

iv. The owner or operator shall conduct daily inspections of # 5 Germ Dryer and related equipment that includes conveyors and the germ feed screw conveyor variable speed drive.

v. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of # 5 Germ Dryer and related equipment.

Control Equipment-Scrubber

B. The Venturi Scrubber (CE2874-2) total liquor flowrate shall be maintained at or above 138 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Venturi Scrubber (CE2874-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to the Venturi Scrubber (CE2874-2), in gallons per minute, continuously. If the total liquor flow rate to the Venturi Scrubber (CE2874-2) falls below the value specified in Condition 5B, the owner or operator shall investigate the Venturi Scrubber (CE2874-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2874-2) is not in operation.

C. The pressure drop across Venturi Scrubber (CE2874-2) shall be maintained between 10 to 14 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Venturi Scrubber (CE2874-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across the Venturi Scrubber (CE2874-2), in inches of water, continuously. If the pressure drop across the Venturi Scrubber (CE2874-2) falls outside the range specified in Condition 5C, the owner or operator shall investigate the Venturi Scrubber (CE2874-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2874-2) is not in operation.

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

D. The 4-Stage Spray Tower Scrubber (CE2874-2) total liquor flowrate shall be maintained at or above 600 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the 4-Stage Spray Tower Scrubber (CE2874-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to the 4-Stage Spray Tower Scrubber (CE2874-2), in gallons per minute, continuously. If the total liquor flow rate to the 4-Stage Spray Tower Scrubber (CE2874-2) falls below the value specified in Condition 5D, the owner or operator shall investigate the 4-Stage Spray Tower Scrubber (CE2874-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the 4-Stage Spray Tower Scrubber (CE2874-2) is not in operation.

E. The pH range of the scrubbing liquor in Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2) shall be maintained between 5 and 8.

i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the scrubbing liquor pH in Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2), on a continuous basis. If the pH of the scrubbing liquor in Scrubber (CE2874-2) falls outside the range specified in Condition 5E, the owner or operator shall investigate Scrubber (CE2874-2) and make corrections to Scrubber (CE2874-2). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Scrubber (CE2874-2) is not in operation.

F. The owner or operator shall develop an operating and maintenance plan for the Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2).

G. The owner or operator shall maintain Product Recovery Cyclone (CE2874-1) and Product Recovery Cyclone (CE2894-1) in manner to ensure proper operation.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclone (CE2874-1).

ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclone (CE2894-1).

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

10. Construction (continued)

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

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11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
(1) Per 567 IAC 22.3(3)"b":
(a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
(b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
(2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
(a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
(b) At least seven (7) days before equipment relocation.
(3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
- The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.

12. Notification, Reporting, and Recordkeeping (Continued)

(4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:

- The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:

(1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.

(2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.

(3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.

(4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E 9th Street Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
15-A-326	15-050	Add PM_{10}, $PM_{2.5}$, and SO_2 & VOC Emission Limits; Install Scrubber & EP178.0 and EP194.0 into common stack	12/10/15	Yes

#5 Germ Dryer (EP178.0)

Permit No.	Project No.	Description	Date	Stack Testing
91-A-176	91-097	Permit Issued	07/24/91	Yes

#3 Germ Transport and Receiver (EP194.0)

Permit No.	Project No.	Description	Date	Stack Testing
02-A-783	01-517	As-built permit issued	10/11/02	Yes
02-A-783-S1	02-596	Corrected control equipment listed	10/28/02	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 19-A-515-S1

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP 318.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
1217.0-1217.3, 1244.1, 1244.2	GP1, #1 Gluten Flash Dryer GP1, #2 Gluten Flash Dryer GP2, #4 Gluten Flash Dryer	See condition 3	See condition 3 for emission unit and control equipment list

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
20-197	Decrease PM2.5 Limit for EP318.0, Increase PM2.5 Limit on GP2, #4 Gluten Flash Dryer	Yes	12/22/20

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1a. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for EP318.0 shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	11.30[3]	NA	0.1 gr/dscf[1]	23.4(7)
PM_{10}	11.30[4]	NA	NA	NAAQS
$PM_{2.5}$	5.0[5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	23.3(2)"d"
Sulfur Dioxide (SO_2)	5.45[8]		500 ppm_v[1]	RACT, 23.3(3)"e"

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit requested by owner or operator in Project 17-198 to restrict potential emissions.
4. The emission limit used in facility wide PM_{10} dispersion modeling analysis that indicates predicted attainment of the PM_{10} National Ambient Air Quality Standards (NAAQS).
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
8. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).

1b. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for GP1, #1 Gluten Flash Dryer (1217.0, 1217.1) and GP1, #2 Gluten Flash Dryer (1217.2, 1217.3) shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Volatile Organic Compounds (VOC)	NA	NA	98% Control Efficiency or 10 $ppm_{v,d}$[1,3,4]	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. The limit for VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].
4. Limit requires 98 percent control efficiency across GP1 Regenerative Thermal Oxidizer (CE1217-4) or VOC concentration of 10 $ppm_{v,d}$ at the outlet of GP2 Regenerative Thermal Oxidizer (CE1244-2) or EP318.0. Compliance with limit shall be demonstrated by measuring the inlet and outlet VOC concentration and flowrate of GP1 Regenerative Thermal Oxidizer (CE1217-4) to determine control efficiency of GP1 Regenerative Thermal Oxidizer (CE1217-4) or measuring the VOC concentration at the outlet GP1 Regenerative Thermal Oxidizer (CE1217-4) or EP318.0. Control efficiency is defined as $\left[\frac{\text{inlet m te} - \text{utlet m te}}{\text{inlet m te}}\right] x100$.

1c. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for GP2, #4 Gluten Flash Dryer (1244.0, 1244.1) shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	5.31[3,10]	NA	NA	NA
PM_{10}	5.31[3, 10]	NA	NA	NA
$PM_{2.5}$	4.45[10]	NA	NA	NA
Sulfur Dioxide (SO_2)	4.50[5,11]	NA	90% Control Efficiency or 10 $ppm_{v,d}$[1,4,6]	NA
Hydrogen Sulfide (H_2S)	1.64[8]	NA	NA	NA
Volatile Organic Compounds (VOC)	NA	NA	98% Control Efficiency or 10 $ppm_{v,d}$[1,4,7,10]	NA
Nitrogen Oxides (NO_x)-Biogas	8.90[9]	NA	0.09 lbs/MMBtu[1,4,12]	NA
Nitrogen Oxides (NO_x)-Natural Gas		NA	0.14 lbs/MMBtu[1,4,12]	NA
Carbon Monoxide (CO)-Biogas	8.90[9]	NA	0.15 lbs/MMBtu[1,4,12]	NA
Carbon Monoxide (CO)-Natural Gas		NA	0.10 lbs/MMBtu[1,4,12]	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limits established to avoid PSD applicability and keep Project 90-257 minor PSD. Project 90-257 netted out of review for PM and PM_{10} using credits obtained from the shutdown of several streets in December of 1990. Any future projects that reevaluate the netting for this time period will require the facility to submit a model examining the equivalency of the increased stack emissions to be credited to road closure emissions.
4. The limit for VOC, SO_2, NOx and CO emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].
5. The limit is based on a H_2S concentration of 6200 ppm_v in the biogas and 91.2% control efficiency for SO_2 from the wet scrubber. The limit also serves to limit SO_2 emission to avoid PSD applicability and keep Project 08-211 minor for PSD.
6. Limit requires 90 percent control efficiency across GP2 Impingent Wet Scrubber (CE1244-1) or SO2 concentration of 10 $ppm_{v,d}$ from the outlet of the GP2 Impingent Wet Scrubber (CE1244-1). Compliance with limit shall be demonstrated by measuring the SO_2 concentration and flowrate of the inlet and outlet of GP2 Impingent Wet Scrubber (CE1244-1) to determine control efficiency of the scrubber or measuring the SO_2 concentration at the outlet of the GP2 Impingent Wet Scrubber (CE1244-1). Control efficiency is defined as $[\frac{\text{inlet m te} - \text{utlet m te}}{\text{inlet m te}}] x100$.
7. Limit requires 98 percent control efficiency across GP2 Regenerative Thermal Oxidizer (CE1244-2) or VOC concentration of 10 $ppm_{v,d}$ at the outlet of GP2 Regenerative Thermal Oxidizer (CE1244-2) or EP318.0. Compliance with limit shall be demonstrated by measuring the inlet and outlet VOC concentration and flowrate of GP2 Regenerative Thermal Oxidizer (CE1244-2) to determine control efficiency of GP2 Regenerative Thermal Oxidizer (CE1244-2) or measuring the VOC concentration at the outlet GP2 Regenerative Thermal Oxidizer (CE1244-2) or EP318.0. Control efficiency is defined as $[\frac{\text{inlet m te} - \text{utlet m te}}{\text{inlet m te}}] x100$.
8. The limit for H_2S emissions is to avoid PSD applicability and keep Project 08-211 minor for PSD.
9. The limit for NOx and CO emissions is to avoid PSD applicability and keep Project 90-257 minor for PSD.
10. Limit restricts potential PM, PM_{10}, $PM_{2.5}$ and VOC emission below PSD significance levels and Project 17-198 is considered a minor modification for the purposes of PSD.
11. Limit restricts potential SO2 emissions below NA-NSR significance level and Project 17-198 is considered a minor modification for the purposes of NA-NSR.
12. Limit is for NOx and CO emissions generated from GP2, #4 Gluten Flash Dryer only, the limit does not include emissions generated from GP2 Regenerative Thermal Oxidizer (CE1244-2).

2. Compliance Demonstration(s)

Compliance Demonstration Table(s)

EP318.0

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Testing[1]	Once Every 3 Calendar Years [3]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Performance Testing[1,4]	Once Every 3 Calendar Years [3]	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	Performance Testing[1,5]	Once Every 3 Calendar Years [3]	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Performance Testing[1,2]	Once Every 3 Calendar Years [3]	1 hour	40 CFR 60, Appendix A, Method 6C

1. Performance testing shall be conducted at worst case emission scenario, #1, #2, and #4 Gluten Flash Dryers are operating at the same time and combusting natural gas (except for SO2 testing).
2. SO2 performance tests shall be conducted while GP2, #4 Gluten Flash Dryer is firing on biogas.
3. Performance testing for PM, PM_{10}, $PM_{2.5}$, and SO_2, shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with PM, PM_{10}, $PM_{2.5}$, SO_2 emission limits as specified in condition 1a, the owner or operator may request to modify the performance testing frequency for PM, PM_{10}, $PM_{2.5}$, and SO_2. The next performance test for PM, PM_{10}, $PM_{2.5}$, and SO_2 shall be completed by December 31, 2022.
4. Performance testing may be conducted for total particulate matter to demonstrate compliance with PM_{10} limit as specified in permit condition 1a.
5. If performance testing using methods specified in 40 CFR 51, Appendix M, 201A with 202 are not performed due high moisture content (stack saturation) then the owner or operator shall demonstrate compliance with $PM_{2.5}$ limit as specified in permit conditions 1a and 1c by conducting methods specified in 40 CFR 60, Appendix A, Method 5 and 40 CFR 51 Appendix M Method 202. Utilizing Method 5, the filterable $PM_{2.5}$ fraction shall be determined by conducting internal particle sizing of the dried gluten product (immediately following the gluten dryers) to determine the $PM_{2.5}$ fraction of the measured total filterable particulate. Utilizing Method 202, the measured condensable fraction shall be considered all $PM_{2.5}$.

GP1, #1 Gluten Flash Dryer (1217.0, 1217.1) #2 Gluten Flash Dryer (1217.2, 1217.3)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
VOC	Performance Testing[1,3]	Once Every 3 Calendar Years [2]	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

1. Performance testing shall be conducted as specified in condition 1b.
2. Performance testing for VOC shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance VOC emission limits as specified in condition 1b, the owner or operator may request to modify the performance testing frequency for VOC. The next performance test for VOC shall be completed by December 31, 2022.
3. As alternative, the owner or operator may elect to demonstrate RTO control efficiency using test method 40 CFR 60, Appendix A, Method 25A.

2. Compliance Demonstration(s) (continued)

GP2, #4 Gluten Flash Dryer (1244.0, 1244.1)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State [1]	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}[1,3]	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$[1,4]	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
SO_2[5,67]	Performance Testing[5,6,7]	Once Every 3 Calendar Years [2]	1 hour	40 CFR 60, Appendix A, Method 6C
Hydrogen Sulfide (H_2S)[1,6]	None	NA	1 hour	40 CFR 60, Appendix A, Method 15
NOx-Biogas[9]	None	NA	1 hour	40 CFR 60, Appendix A, Method 7E
NOx-Natural gas[9]	None	NA	1 hour	40 CFR 60, Appendix A, Method 7E
CO-Biogas[9]	None	NA	1 hour	40 CFR 60, Appendix A, Method 10
CO-Natural Gas[9]	None	NA	1 hour	40 CFR 60, Appendix A, Method 10
VOC[1,5,8]	Performance Testing[1,5,8]	Once Every 3 Calendar Years [2]	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

1. Performance testing shall be conducted at the exhaust outlet of GP2 Regenerative Thermal Oxidizer (CE1244-2) or at outlet of EP318.0 while Gluten Flash Dryer #1 and #2 are not in operation.
2. Performance testing for SO_2, and VOC shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with SO_2 and VOC emission limits as specified in condition 1c, the owner or operator may request to modify the performance testing frequency for SO_2 and VOC. The next performance test for SO_2 and VOC shall be completed by December 31, 2022.
3. Performance testing may be conducted for total particulate matter to demonstrate compliance with PM_{10} limit as specified in permit condition 1c.
4. If performance testing using methods specified in 40 CFR 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation) then the owner or operator shall demonstrate compliance with $PM_{2.5}$ limit as specified in permit conditions 1a and 1c by conducting methods specified in 40 CFR 60, Appendix A, Method 5 and 40 CFR 51 Appendix M Method 202. Utilizing Method 5, the filterable $PM_{2.5}$ fraction shall be determined by conducting internal particle sizing of the dried gluten product (immediately following the gluten dryers) to determine the $PM_{2.5}$ fraction of the measured total filterable particulate. Utilizing Method 202, the measured condensable fraction shall be considered all $PM_{2.5}$.
5. Performance testing shall be conducted as specified in condition 1c or at outlet of EP318.0 while Gluten Flash Dryer #1 and #2 are not in operation.
6. SO2 and H_2S performance tests shall be conducted while GP2, #4 Gluten Flash Dryer is firing on biogas.
7. During the SO_2 test, GPC shall collect a sample of the biogas being sent to the dryer during each stack test run. H_2S concentration shall be determined using a GC/FPD analysis. The H_2S concentrations determined during the SO_2 testing shall be supplied with the test reports submitted for SO_2. GPC may request different test methods in the testing protocol if alternative test methods or procedures are preferable.
8. As alternative, the owner or operator may elect to demonstrate RTO control efficiency using test method 40 CFR 60, Appendix A, Method 25A.
9. Performance testing shall be conducted at the exhaust outlet of GP2, #4 Gluten Flash Dryer or at the inlet to GP2 Regenerative Thermal Oxidizer (CE1244-2).

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

2. Compliance Demonstration(s) (continued)

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

The following emission unit and control equipment are vented directly or indirectly through this emission point:

Emission Unit Description	Maximum Rated Capacity	Control Equipment	
GP1 #1 Gluten Flash Dryer (EU1217.0) w/ Product Recovery Cyclone	1.35 tons of dried gluten per hour	GP1 TurboTak Spray Chamber Scrubber W/ Cyclonic Separator (CE1217-3)	GP1 Regenerative Thermal Oxidizer (CE1217-4), Maximum Heat Input: 16.5 MMBtu per hour with Low NOx Burners
GP1 #1 Gluten Flash Dryer Direct Fired Burner (EU1217.1)	16 MMBtu per hour		
GP1 #2 Gluten Flash Dryer (EU1217.2) w/Product Recovery Cyclone	1.35 tons of dried gluten per hour		
GP1 #2 Gluten Flash Dryer Direct Fired Burner (EU1217.3)	16 MMBtu per hour		
GP2 #4 Gluten Flash Dryer (EU1244.0) w/six Parallel Product Recovery Cyclones	6.13 tons of dried gluten per hour	GP2 Impingent Wet Scrubber (CE1244-1)	GP2 Regenerative Thermal Oxidizer (CE1244-2), Maximum Heat Input: 16.5 MMBtu per hour with Low NOx Burners
GP2 Low-NOx Burner (EU1244.1)	36.0 MMBtu per hour (total); 28,000 SCFH (Biogas); 36,000 SCFH (Natural Gas)		

3. Emission Point Characteristics (continued)

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	180 Feet
Discharge Style	Vertical Unobstructed Discharge
Stack Outlet Dimensions (inches)	78 inches Diameter
Exhaust Temperature (ºF)	235 °F
Exhaust Flowrate (scfm)	102, 000 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

GP2, #4 Gluten Flash Dryer (EU 1244.0)

A. The #4 Gluten Flash Dyer shall only combust natural gas, natural gas mixed with biogas from on-site waste water treatment plant, and biogas from on-site wastewater treatment plant with combustion air.

Control Equipment- Scrubbers

B. The GP1 Turbotak Scrubber (CE1217-3) atomizing liquor flow rate shall be maintained at or above 80 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the atomizing liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

ii. The owner or operator shall collect and record the atomizing liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3), in gallons per minute, continuously. If the atomizing liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3) falls below the value specified in Condition 5B, the owner or operator shall investigate the GP1 Turbotak Scrubber (CE1217-3) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the GP1 Turbotak Scrubber (CE1217-3) is not in operation.

C. The GP1 Turbotak Scrubber (CE1217-3) wash liquor flow rate shall be maintained at or above 650 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the wash liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the wash liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3), in gallons per minute, continuously. If the wash liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3) falls below the value specified in Condition 5C, the owner or operator shall investigate the GP1 Turbotak Scrubber (CE1217-3) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the GP1 Turbotak Scrubber (CE1217-3) is not in operation.

D. The GP2 Impingent Wet Scrubber (CE1244-1) total liquor flowrate shall be maintained at or above 500 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the GP2 Impingent Wet Scrubber (CE1244-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to the GP2 Impingent Wet Scrubber (CE1244-1), in gallons per minute, continuously. If the total liquor flow rate to the GP2 Impingent Wet Scrubber (CE1244-1) falls below the value specified in Condition 5C, the owner or operator shall investigate the GP2 Impingent Wet Scrubber (CE1244-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the GP2 Impingent Wet Scrubber (CE1244-1) is not in operation.

E. The pressure drop across GP2 Impingent Wet Scrubber (CE1244-1) shall be maintained between 6 to 12 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the GP2 Impingent Wet Scrubber (CE1244-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across the GP2 Impingent Wet Scrubber (CE1244-1), in inches of water, continuously. If the pressure drop across the GP2 Impingent Wet Scrubber (CE1244-1) falls outside the range specified in Condition 5D, the owner or operator shall investigate the GP2 Impingent Wet Scrubber (CE1244-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP2 Impingent Wet Scrubber (CE1244-1) is not in operation.

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

F. The pH range of the scrubbing liquor in GP1 Turbotak Scrubber (CE1217-3) shall be maintained between 5 and 8.

i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the GP1 Turbotak Scrubber (CE1217-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the scrubbing liquor pH in GP1 Turbotak Scrubber (CE1217-3), on a continuous basis. If the pH of the scrubbing liquor GP1 Turbotak Scrubber (CE1217-3) falls outside the range specified in Condition 5F, the owner or operator shall investigate GP1 Turbotak Scrubber (CE1217-3) and make corrections to GP1 Turbotak Scrubber (CE1217-3). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP1 Turbotak Scrubber (CE1217-3) is not in operation.

G. The pH range of the scrubbing liquor in GP2 Impingent Wet Scrubber (CE1244-1) shall be maintained between 5 and 8.

i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the GP2 Impingent Wet Scrubber (CE1244-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the scrubbing liquor pH in GP2 Impingent Wet Scrubber (CE1244-1), on a continuous basis. If the pH of the scrubbing liquor in GP2 Impingent Wet Scrubber (CE1244-1) falls outside the range specified in Condition 5E, the owner or operator shall investigate GP2 Impingent Wet Scrubber (CE1244-1) and make corrections to GP2 Impingent Wet Scrubber (CE1244-1). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP2 Impingent Wet Scrubber (CE1244-1) is not in operation.

H. The owner or operator shall develop an operating and maintenance plan for GP1 Turbotak Scrubber (CE1217-3) and GP2 Impingent Wet Scrubber (CE1244-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP1 Turbotak Scrubber (CE1217-3).
ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP2 Impingent Wet Scrubber (CE1244-1).

Control Equipment- RTOs

I. The owner or operator shall only bypass GP2 Regenerative Thermal Oxidizer (CE1244-2) for purposes of start-up, malfunction and/or maintenance for a maximum of 200 hours per twelve month rolling period. GP2 Regenerative Thermal Oxidizer (CE1244-2) shall be in operation and at the operating temperature specified in condition 5J prior to processing any product (gluten).

i. The owner or operator shall develop and implement an operating plan to ensure GP2 Regenerative Thermal Oxidizer (CE1244-2) is at the required operating temperature prior to processing any gluten in GP2 #4 Gluten Flash Dyer. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
ii. The owner or operator shall record the total hours and the cause of GP2 Regenerative Thermal Oxidizer (CE1244-2) bypass on a monthly basis. The owner or operator shall calculate and record the rolling 12-month totals.

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

J. The owner or operator shall maintain a GP2 Regenerative Thermal Oxidizer (CE1244-2) combustion chamber temperature to no less than 1,600 degrees Fahrenheit based on a 3-hour block average.

i. The owner or operator shall properly operate and maintain equipment to monitor the chamber temperature of GP2 Regenerative Thermal Oxidizer (CE1244-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the combustion chamber temperature of GP2 Regenerative Thermal Oxidizer (CE1244-2), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of GP2 Regenerative Thermal Oxidizer (CE1244-2) falls below the value specified in Condition 5J, the owner or operator shall investigate GP2 Regenerative Thermal Oxidizer (CE1244-2) and make corrections GP2 Regenerative Thermal Oxidizer (CE1244-2). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP2 Regenerative Thermal Oxidizer (CE1244-2) is not in operation.

K. The owner or operator shall only bypass GP1 Regenerative Thermal Oxidizer (CE1217-4) for purposes of start-up, malfunction and/or maintenance for a maximum of 200 hours per twelve month rolling period. GP1 Regenerative Thermal Oxidizer (CE1217-4) shall be in operation and at the operating temperature specified in condition 5L prior to processing any product (gluten).

i. The owner or operator shall develop and implement an operating plan to ensure GP1 Regenerative Thermal Oxidizer (CE1217-4) is at the required operating temperature prior to processing any gluten in GP1 #1 and #2 Gluten Flash Dyers. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.

ii. The owner or operator shall record the total hours and the cause of GP1 Regenerative Thermal Oxidizer (CE1217-4) bypass on a monthly basis. The owner or operator shall calculate and record the rolling 12-month totals.

L. The owner or operator shall maintain a GP1 Regenerative Thermal Oxidizer (CE1217-4) combustion chamber temperature to no less than 1,600 degrees Fahrenheit based on a 3-hour block average.

i. The owner or operator shall properly operate and maintain equipment to monitor the chamber temperature of GP1 Regenerative Thermal Oxidizer (CE1217-4). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the combustion chamber temperature of GP1 Regenerative Thermal Oxidizer (CE1217-4), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of GP1 Regenerative Thermal Oxidizer (CE1217-4) falls below the value specified in Condition 5L, the owner or operator shall investigate GP1 Regenerative Thermal Oxidizer (CE1217-4) and make corrections GP1 Regenerative Thermal Oxidizer (CE1217-4). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP1 Regenerative Thermal Oxidizer (CE1217-4) is not in operation.

M. The owner or operator shall combust only natural gas or process off-gasses in GP2 Regenerative Thermal Oxidizer (CE1244-2) and GP1 Regenerative Thermal Oxidizer (CE1217-4).

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

N. The owner or operator shall develop an operating and maintenance plan for GP2 Regenerative Thermal Oxidizer (CE1244-2) and GP1 Regenerative Thermal Oxidizer (CE1217-4), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP2 Regenerative Thermal Oxidizer (CE1244-2).
ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP1 Regenerative Thermal Oxidizer (CE1217-4).

Low-NOx Burner (EU1244.1)

O. The owner or operator shall tune Low-NOx Burner (EU1244.1) on an annual basis to maintain good combustion. The annual burner tune-up activity shall include at a minimum:

- Inspect the burner-Clean and replace any components, as necessary
- Inspect the flame pattern and flame dimensions-Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications, if available.
- Inspect the air-to fuel ratio control system-Ensure the control system is calibrated and functioning properly, if such a system is installed.
- Optimize emissions of carbon dioxide- Optimize emissions consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which unit may be subject.
- Verify that emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.

P. The owner or operator shall maintain record on annual basis of the following:

- The completion date of Low-NOx Burner (EU1244.1) tuning as specified in condition 5O,
- Low-NOx Burner (EU1244.1) emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.

Q. The owner or operator shall develop an operating and maintenance plan for the Low-NOx Burner (EU1244.1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Low-NOx Burner (EU1244.1).

Other Requirements

R. The owner or operator shall maintain GP1 and GP2 Gluten Dryers Product Recovery Cyclones in manner to ensure proper operation.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP1 and GP2 Gluten Dryers Product Recovery Cyclones.

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6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

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7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E 9th Street Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

GP1: Gluten Flash Dryer #1, GP1: Gluten Flash Dryer #2 and GP2: Gluten Flash Dryer #4 (EP318.0)

Permit No.	Project No.	Description	Date	Stack Testing
19-A-515	17-198	Add RTOs, Debottleneck GP2, #4 Gluten Flash Dryer	11/04/19	Yes

GP1, #1 Gluten Flash Dryer w/ Direct Fired Burner, #2 Gluten Flash Dryer W/ Direct Fired Burner (EP43.1)

Permit No.	Project No.	Description	Date	Stack Testing
75-A-087	75-087	Add Venturi and Packed Bed Scrubbers to Existing Dryers	05/06/75	Yes
75-A-087-S1	15-050	Modify Scrubbers; Add PM_{10}, $PM_{2.5}$ and SO_2 Emission Limits	12/10/15	Yes
75-A-087-S2	15-455	Install Turbotak Scrubber as Replacement Controls	05/17/16	Yes

GP2, #4 Gluten Flash Dryer w/ Gas Fired Heater (EP173.0)

Permit No.	Project No.	Description	Date	Stack Testing
91-A-067	90-257	Original Permit	04/05/91	Yes
91-A-067-S1	06-346	Increase PM/PM_{10} Allowable Emissions	12/05/06	Yes
91-A-067-S2	08-211	Allow Use of Biogas as Fuel	03/12/09	Yes
91-A-067-S3	18-448	Replacement of Low-NOx Burner	11/28/18	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 18-A-136

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP 319.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
1282.0	Gluten Day Bin	350 tons of gluten per hour	Pulse Jet Baghouse (CE1282-1)
1275.0	Railcar Loading: Gluten	11.5 tons of gluten per hour (load-out rate)	

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-404	New Gluten Day Bin, enclosure and aspiration of existing Gluten railcar loading (RAILCAR2) to Baghouse	Yes	05/30/18

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for EP319.0 shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.30[3]	NA	0.1 gr/dscf[1]	567 IAC 23.4(7)
PM_{10}	0.30[3]	NA	NA	See note 3
$PM_{2.5}$	0.30[3,4]	NA	NA	NAAQS
SO_2	0.10[5,6]	NA	500 ppm_v[1]	RACT, 567 IAC 23.3(3)"e"
VOC	NA	NA	NA	NA
Opacity	NA	NA	40%[7,8]	567 IAC 23.3(2)"d"

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is based on a twelve (12) month rolling total.
3. Limit maintains potential PM, PM_{10}, $PM_{2.5}$ emission below PSD significance levels and Project 17-404 is considered a minor modification for the purposes of PSD.
4. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
5. Limit maintains potential SO2 emissions below NA-NSR significance level and Project 17-404 is considered a minor modification for the purposes of NA-NSR.
6. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
7. The emission limit is a six (6) minute average.
8. An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Testing[1]	One-Time[1]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Performance Testing[1]	One-Time	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	Performance Testing[2]	One-Time	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	NA	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Performance Testing	One-Time	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	NA	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

1. Performance testing may be conducted for total particulate matter to demonstrate compliance with PM_{10} and $PM_{2.5}$ limits as specified in permit condition 1.
2. If method 40 CFR 51, Appendix M, 201A cannot be performed due to stack blockage then the owner operator shall add a temporary stack extension to perform method 40 CFR 51, Appendix M, 201A. The temporary stack extension shall conform to 40 CFR Part 60, Appendix A, Method 1.

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of gluten railcar aspiration system.

2. Compliance Demonstration(s) (continued)

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	90 Feet
Discharge Style	Vertical Unobstructed Discharge
Stack Outlet Dimensions (inches)	14 inch Diameter
Exhaust Temperature (^{o}F)	92 ^{o}F
Exhaust Flowrate (scfm)	5750 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. These emission units are not subject to the New Source Performance Standards (NSPS) as there are no applicable subparts at this time.

B. These emission units are not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) as there are no subparts for this source category.

The absence of the inclusion of any NSPS or NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS or NESHAP conditions.

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5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall operate the Gluten Railcar Loading (EU1275.0) in manner to ensure that particulate emissions generated during Gluten Railcar Loading are captured and vented to Pulse Jet Baghouse (CE 1282-1)

i. The owner or operator shall check for the presence of visible emissions from Gluten Railcar Loading area (EU1275.0) once per calendar day. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions during gluten railcar loading. If the owner or operator observes visible emissions during gluten railcar loading, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Gluten Railcar Loading (EU1275.0) is not in operation.

B. The differential pressure drop across Pulse Jet Baghouse (CE1282-1) shall be maintained between 0.3 and 6 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Pulse Jet Baghouse (CE1282-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across Pulse Jet Baghouse (CE1282-1), in inches of water, at least once per day. If the pressure drop across Pulse Jet Baghouse (CE1282-1) falls outside the range specified in Condition 5C, the owner or operator shall investigate Pulse Jet Baghouse (CE1282-1) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Pulse Jet Baghouse (CE1282-1) are not in operation.

C. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1282-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Pulse Jet Baghouse (CE1282-1).

D. The owner or operator shall rescind air construction permit 16-A-037, Gluten Railcar Loading within 30-days after completion of the gluten railcar loading project.

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6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

10. Construction (continued)

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

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11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
(1) Per 567 IAC 22.3(3)"b":
(a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
(b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
(2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
(a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
(b) At least seven (7) days before equipment relocation.
(3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
- The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.

12. Notification, Reporting, and Recordkeeping (Continued)

(4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:

- The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:

(1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.

(2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.

(3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.

(4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources Wallace Office Building 502 E 9th St Des Moines, IA 50319 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing

END OF PERMIT

Air Quality Construction Permit

Permit Number: 03-A-471-S3

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP531.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Nameplate Capacity	Maximum Process Design Capacity	Control Equipment Description and ID
1260.0	Gluten Plant 1 Pneumatic Transport System	5.1 tons dried gluten per hour	2.7 tons dried gluten per hour	Pulse Jet Baghouse (CE1260-1)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
17-404	Baghouse Replacement	Yes	05/30/18

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for EP531.0 shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.42[3,4]	NA	0.1 gr/dscf[1]	567 IAC 23.4(7)
PM_{10}	0.42[4,5]	NA	NA	NAAQS
$PM_{2.5}$	0.122[4,6]	NA	NA	NAAQS
SO_2	0.10[7,8]	NA	500 ppm_v[1]	RACT, 567 IAC 23.3(3)"e"
VOC	NA	NA	NA	NA
Opacity	NA	NA	40%[9,10]	567 IAC 23.3(2)"d"

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is based on a twelve (12) month rolling total.
3. Emission rate requested to maintain Project 03-188 below PSD significance level.
4. Limit maintains potential PM, PM_{10}, $PM_{2.5}$ emission below PSD significance levels and Project 17-404 is considered a minor modification for the purposes of PSD.
5. The emission limit used in facility wide PM_{10} dispersion modeling analysis that indicates predicted attainment of the PM_{10} National Ambient Air Quality Standards (NAAQS).
6. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
7. Limit maintains potential SO2 emissions below NA-NSR significance level and Project 17-404 is considered a minor modification for the purposes of NA-NSR.
8. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
9. The emission limit is a six (6) minute average.
10. An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Testing[1]	One-Time[1]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Performance Testing[1]	One-Time	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	Performance Testing[2]	One-Time	2 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	NA	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	NA	NA	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	NA	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

1. Performance testing may be conducted for total particulate matter to demonstrate compliance with PM_{10} limit as specified in permit condition 1.
2. If method 40 CFR 51, Appendix M, 201A cannot be performed due to stack blockage then the owner operator shall add a temporary stack extension to perform method 40 CFR 51, Appendix M, 201A. The temporary stack extension shall conform to 40 CFR Part 60, Appendix A, Method 1.

2. Compliance Demonstration(s) (continued)

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of Pulse Jet Baghouse (CE1260-1).

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

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3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	60 Feet
Discharge Style	Vertical Unobstructed Discharge
Stack Outlet Dimensions (inches)	24 inch Diameter
Exhaust Temperature (^{o}F)	120 ^{o}F
Exhaust Flowrate (scfm)	10,300 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

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4. Federal Standards

A. These emission units are not subject to the New Source Performance Standards (NSPS) as there are no applicable subparts at this time.

B. These emission units are not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) as there are no subparts for this source category.

The absence of the inclusion of any NSPS or NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS or NESHAP conditions.

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5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The differential pressure drop across Pulse Jet Baghouse (CE1260-1) shall be maintained between 0.3 and 6 inches of water column.

i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Pulse Jet Baghouse (CE1260-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across Pulse Jet Baghouse (CE1260-1), in inches of water, continuously. If the pressure drop across Pulse Jet Baghouse (CE1260-1) falls outside the range specified in Condition 5A, the owner or operator shall investigate Pulse Jet Baghouse (CE1260-1) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Pulse Jet Baghouse (CE1260-1) are not in operation.

B. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1260-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Pulse Jet Baghouse (CE1260-1).

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6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

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7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

10. Construction (continued)

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

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11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
(1) Per 567 IAC 22.3(3)"b":
(a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
(b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
(2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
(a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
(b) At least seven (7) days before equipment relocation.
(3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
- The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.

12. Notification, Reporting, and Recordkeeping (Continued)

(4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:

- The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:

(1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.

(2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.

(3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.

(4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources Wallace Office Building 502 E 9th St Des Moines, IA 50319 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
03-A-471	03-188	Original Permit	05/01/03	Yes
03-A-471-S1	15-051	Add PM_{10}, $PM_{2.5}$ and SO_2 emission limits, modify stack characteristics	07/06/15	Yes
03-A-471-S2	16-036	Correct Maximum Capacity; modify flowrate & exhaust temperature	10/11/16	None

END OF PERMIT

Air Quality Construction Permit

Permit Number: 06-A-1261-S2

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP 545.0

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
See condition 3	Seventeen Expellers for Spent Germ Hulls	See condition 3	Two Baghouses in parallel (CE2876-1, CE2882-1)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
20-197	Decrease PM2.5 Emission Limit	None	12/22/20

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1a. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for EP545.0 shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	1.50[3]	NA	0.1 gr/dscf[1]	23.4(7)
PM_{10}	1.50[4]	NA	NA	NAAQS
$PM_{2.5}$	0.61[5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6,7]	23.3(2)"d"
Sulfur Dioxide (SO_2)	0.50[8]	NA	10.0 $ppm_{v,d}$[1,9]	RACT
Volatile Organic Compounds (VOC)	NA	NA	18.7 $ppm_{v,d}$[1,9]	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit requested by GPC to restrict potential emissions.
4. The emission limit used in facility wide PM_{10} dispersion modeling analysis that indicates predicted attainment of the PM_{10} National Ambient Air Quality Standards (NAAQS).
5. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
6. The emission limit is a six (6) minute average.
7. An exceedance of the indicator opacity of "No visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
8. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).
9. The limit for SO_2 and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

1b. Other Emission Limits

The following emission limits for Expellers #7 – 12, 14, 16, and 17 (EU 2882 – EU2887, EU2889, EU2892, EU2893) shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – State	NA	NA	0.078 gr/scf[3]	31.20(1)"d", LAER
PM_{10}	NA	NA	NA	NA
$PM_{2.5}$	NA	NA	NA	NA
Opacity	NA	NA	NA	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is a twelve (12) month rolling total.
3. Limit established when the Muscatine Area was designated non-attainment for TSP (PM). The emission units associated with the East Baghouse (CE 2882-1) are subject to a Lowest Achievable Emission Rate (LAER) limit of 0.078 gr/scf. As is listed in Permit Condition 3, those units are Expellers #7 – 12, 14, 16, and 17 (EUs 2882 – 2887, 2889, 2892 – 2893, respectively). The PM emissions from the exit of the East Baghouse are limited to 0.078 gr/scf.

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}[1]	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	None	NA	2 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

1 Performance testing may be conducted for total particulate matter to demonstrate compliance with PM_{10} limit as specified in permit condition 1a.

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

The following emission unit and control equipment are vented directly or indirectly through this emission point:

Emission Unit Description	Maximum Rated Capacity (tons/hr)	Control Equipment
#7 Expeller (EU2882.0)	0.978	East Baghouse (CE 2882-1)
#8 Expeller (EU2883.0)	0.978	
#9 Expeller (EU2884.0)	0.978	
#10 Expeller (EU2885.0)	0.978	
#11 Expeller (EU2886.0)	0.978	
#12 Expeller (EU2887.0)	0.978	
#14 Expeller (EU2889.0)	0.978	
#16 Expeller (EU2892.0)	0.978	
#17 Expeller (EU2893.0)	0.978	
#1 Expeller (EU2876.0)	0.95	West Baghouse (CE 2876-1)
#2 Expeller (EU2877.0)	0.95	
#3 Expeller (EU2878.0)	0.95	
#4 Expeller (EU2879.0)	0.95	
#5 Expeller (EU2880.0)	0.95	
#6 Expeller (EU2881.0)	0.95	
#13 Expeller (EU2888.0)	0.95	
#15 Expeller (EU2889.0)	0.95	

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	95 Feet
Discharge Style	Vertical Unobstructed Discharge
Stack Outlet Dimensions (inches)	36 inch Diameter
Exhaust Temperature (°F)	115°F
Exhaust Flowrate (scfm)	20,769 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The differential pressure drop across the Baghouse (CE2876-1) shall be maintained between 0.1 and 4 inches water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Baghouse (CE2876-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across the Baghouse (CE2876-1), in inches of water, at least once per day. If the pressure drop across the Baghouse (CE2876-1) falls outside the range specified in Condition 5A., the owner or operator shall investigate the Baghouse (CE2876-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Baghouse (CE2876-1) is not in operation.

B. The differential pressure drop across the Baghouse (CE2882-1) shall be maintained between 0.1 and 4 inches water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Baghouse (CE2882-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across the Baghouse (CE2882-1), in inches of water, at least once per day. If the pressure drop across the Baghouse (CE2882-1) falls outside the range specified in Condition 5B., the owner or operator shall investigate the Baghouse (CE2882-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Baghouse (CE2882-1) is not in operation.

C. The owner or operator shall develop an operating and maintenance plan for Baghouse (CE2876-1) and Baghouse (CE2882-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE2876-1).

ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE2882-1).

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

10. Construction (continued)

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
(1) Per 567 IAC 22.3(3)"b":
(a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
(b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
(2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
(a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
(b) At least seven (7) days before equipment relocation.
(3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
- The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.

(4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
- The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

12. Notification, Reporting, and Recordkeeping (Continued)

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E 9th Street Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
06-A-1261	06-610	Original Permit (replaced permits 76-A-091 & 85-A-044-S1)	12/13/06	Yes
06-A-1261-S1	15-050	Modify PM, PM_{10} emission limits, add $PM_{2.5}$, SO_2 and VOC emission limits	12/10/15	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 17-A-112

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Director of Environmental Services

563.264.4569
mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
Muscatine, IA 52761

Permitted Equipment

Emission Point ID: EP556.0

Emission Unit(s) and Control Equipment: Fermentation & Distillation
(See condition 3 for emission unit and control equipment list)

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
16-385	Remove old columns, Add new columns, merge emission points, Add Scrubber, Add RTO	Yes	05/02/17

Under the Direction of the Director of the
Department of Natural Resources

PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits for EP556.0 shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.110[3,4]	NA	0.1 gr/dscf[1]	567 IAC 23.4(7)
PM_{10}	0.110[3,4]	NA	NA	PSD Synthetic Minor
$PM_{2.5}$	0.110[4,5]	NA	NA	NAAQS
Opacity	NA	NA	40%[8, 9]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	2.0[6,7]	NA	NA	NAAQS
Nitrogen Oxides (NO_x)	3.0[4]	NA	NA	PSD Synthetic Minor
Volatile Organic Compounds (VOC)	1.60[10, 11]	NA	NA	PSD Synthetic Minor
Carbon Monoxide (CO)	6.0[4]	NA	NA	PSD Synthetic Minor
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is based on a twelve (12) month rolling total.
3. Emission limit maintains projects 06-168 and 07-094 PSD significance thresholds.
4. Limit restricts potential emissions below PSD significance level and Projects 16-149 and 16-385 are considered a minor modification for the purposes of PSD.
5. Emission limit used in facility wide 24-hr $PM_{2.5}$ dispersion modeling analysis conducted in Project 16-385 that indicates predicted attainment of the $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS).
6. Limit restricts potential SO2 emissions below NA-NSR significance level and Projects 16-149 and 16-385 are considered a minor modification for the purposes of NA-NSR.
7. Emission limit used in facility wide 1-hr SO_2 dispersion modeling analysis conducted in Project 16-385 that indicates predicted attainment of the SO_2 National Ambient Air Quality Standards (NAAQS).
8. The emission limit is a six (6) minute average.
9. An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
10. VOC emission limit established to maintain projects 16-149 and 16-385 below significant net emissions increase for purposes of PSD review.
11. Requested emission limit maintains projects 06-168 and 07-094 (Mash Fermenters Nos. 24-29 (EU6324.0-EU6329.0) below PSD significance rate.

The following emission limits for Mash Fermenters Nos. 24-33 with Primary Impinjet/Packed Bed Scrubber and Secondary Packed Bed Scrubber (formerly EP544.0) shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
PM_{10}	0.49[3]	NA	NA	NAAQs
$PM_{2.5}$	0.185[4]	NA	NA	NAAQs
Sulfur Dioxide (SO_2)	0.258[5]	NA	NA	RACT

1. The emission limit is expressed as the average of three (3) runs.
2. The emission limit is based on a twelve (12) month rolling total.
3. he limit for PM_{10} emissions is established to correspond to the emission rate used in the dispersion modeling required by the consent decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV016788, Iowa District Court in and for Muscatine County (July 17, 2006)].
4. The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
5. The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Testing[1]	Once every 3 calendar years[3]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Performance Testing[1,2]	Once every 3 calendar years[3]	1 hour	40 CFR 51, Appendix M, 201A with 202
PM_{10} - Mash Fermenters Nos. 24-33 with Primary Impinjet/Packed Bed Scrubber and Secondary Packed Bed Scrubber	NA	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	Performance Testing[1]	Once every 3 calendar years[3]	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$ - Mash Fermenters Nos. 24-33 with Primary Impinjet/Packed Bed Scrubber and Secondary Packed Bed Scrubber	NA	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	NA	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	Performance Testing	One-Time	1 hour	40 CFR 60, Appendix A, Method 6C
SO_2. Mash Fermenters Nos. 24-33 with Primary Impinjet/Packed Bed Scrubber and Secondary Packed Bed Scrubber	NA	NA	1 hour	40 CFR 60, Appendix A, Method 6C
NO_x	Performance Testing	One-Time	1 hour	40 CFR 60, Appendix A, Method 7E
CO	Performance Testing	One-Time	1 hour	40 CFR 60, Appendix A, Method 10
VOC-EP556.0	Performance Testing	Once every 3 calendar years[3]	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP	None	NA	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

1. Compliance testing shall be conducted when Mash Fermenters Nos. 24-33 are exhausting to the atmosphere through EP556.0 at the maximum exhaust flow rate.
2. Performance testing may be conducted for total particulate matter to demonstrate compliance with PM_{10} and $PM_{2.5}$ limit as specified in permit condition 1.
3. After the initial performance test, performance testing shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the emission limits in condition 1, the owner or operator may request to modify the performance testing frequency.

2. Compliance Demonstration(s) (continued)

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of equipment specified in condition 3 (EP556.0).

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in this condition as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

The following emission unit and control equipment are vented directly or indirectly through this emission point:

EU ID	Description	Maximum Capacity	Control Equipment Description and ID		
EU6324.0 - EU6329.0	Mash Fermenters Nos. 24-29	200,000 gallons (storage), each 45,000 gallons of corn mash per hour, each	Primary Impinjet/Packed Bed Scrubber (CE6301-1)	Secondary Packed Bed Scrubber (CE6301-2)	Regenerative Thermal Oxidizer RTO (CE6301-3), Maximum Heat Input: 1.5 MMBtu per hour (natural gas fired only)
EU6330.0 - EU6333.0	Mash Fermenters Nos. 30-33	800,00 gallons (storage), each 90,000 gallons of corn mash per hour, each			
EU1072.0 - EU1074.0	Beer Wells A, B, D	96,000 gallons of beer per hour per beer well			
EU1120.0	Beer Degasification Column #1	96,000 gallons of beer per hour (feed rate)	Distillation Area Scrubber (CE1120-1)		
EU1082.0 - EU1083.0	Beer Columns #1 and #2	25,000 gallons of beer per hour per column (feed rate)			
EU1084.0	Beer Column #3	30,000 gallons of beer per hour (feed rate)			
EU1085.0	Beer Column #4	45,000 gallons of beer per hour (feed rate)			
EU1121.0	High Pressure Purification Column #1 (Extractive Distillation)	16,740 gallons of high wines per hour (feed rate)			
EU1112.0	#6 Alcohol Column	2,500 gallons of proof ethanol per hour (feed rate)			
EU1114.0	#7 Alcohol Column	13,542 gallons of proof ethanol per hour (feed rate)			
EU1122.0	Heads Concentration Column	5,000 gallons of alcohol per hour (feed rate)			
EU1123.0	Fusil Oil Column	27,3000 gallons fusel alcohol per hour (feed rate)			
EU1105.0 - EU1106.0	Low Proof Surge Tank #1, Low Proof Surge Tank #2	946 gallons low Proof Ethanol per hour (feed rate) per tank			
EU1107.0	High Proof Surge Tank	7, 246 gallons high proof ethanol per hour			

3. Emission Point Characteristics (continued)

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	110 Feet
Discharge Style	Vertical Unobstructed Discharge
Stack Outlet Dimensions (inches)	30 inch Diameter
Exhaust Temperature (ºF)	250 ºF
Exhaust Flowrate (scfm)	12,400 scfm

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):
The following subparts apply to equipment that are in VOC service located at the: alcohol production operations at Grain Processing Corporation (Plant No. 70-01-004). As specified in 60.481a, equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart. As specified in 60.481a, in VOC service means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. As specified in §60.480a(4), this subpart does not apply to equipment associated with beverage grade alcohol production only. In cases, when equipment used to produce non-beverage alcohol and equipment used to produce common alcohol feedstock for both beverage and non-beverage alcohol production, the following subparts applies

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
Equipment Leaks	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	VVa	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	NA	23.1(2)”nn”	§60.480a-60.489a

4. Federal Standards (continued)

The owner or operator shall comply with all reporting and recordkeeping requirements as specified 40 CFR Part 60 Subparts A and VVa, specifically §60.486a and §60.487a.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):
The following subpart apply to the alcohol production operations at Grain Processing Corporation (Plant No. 70-01-004). This subpart does not apply to operations, equipment and operating periods associated with beverage grade alcohol production only. In cases, when equipment used to produce non-beverage alcohol and equipment used to produce common alcohol feedstock for both beverage and non-beverage alcohol production such as Mash Fermenters Nos. 24-33 (EU6324.0-EU6333.0), the following subpart applies.

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
Fermentation & Distillation	A	General Provisions	NA	23.1(4)	§63.2540 (Table 12)
	FFFF	Miscellaneous Organic Chemical Manufacturing	(1), (2)	23.1(4)"cf"	§63.2435 – §63.2550
Equipment Leaks			(3)		

(1) The Fermentation & Distillation equipment are considered a *continuous operation* in accordance with the definition in §63.2550. This equipment shall be considered new and reconstructed affected sources for purposes of this subpart.
(2) As specified in §63.2455(a), the owner or operator must meet each emission limit in Table 1 that applies to continuous process vents and must meet each applicable requirement §63.2455 (b) and§63.2455 (c).
(3) As specified in §63.2480(a), meet each requirement in Table 6 to this subpart that applies to equipment leaks as applicable.

The owner or operator shall comply with all reporting, notification, and recordkeeping requirements as specified 40 CFR Part 63 Subpart FFFF, specifically §63.2515, §63.2520, 63.2525.

The absence of the inclusion of any NSPS or NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS or NESHAP conditions.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

Control Equipment-Scrubbers

A. The total liquor flowrate of the Primary Packed Bed Scrubber (CE6301-1) shall be maintained at or above 6 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Primary Packed Bed Scrubber (CE6301-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to the Primary Packed Bed Scrubber (CE6301-1), in gallons per minute, at least once per day. If the total liquor flow rate to the Primary Packed Bed Scrubber (CE6301-1) falls below the value specified in Condition 5A., the owner or operator shall investigate the Primary Packed Bed Scrubber (CE 6301-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Primary Packed Bed Scrubber (CE6301-1) is not in operation.

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

B. The owner or operator shall develop an operating and maintenance plan for the Primary Packed Bed Scrubber (CE6301-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Primary Packed Bed Scrubber (CE6301-1).

C. The total liquor flowrate of the Secondary Packed Bed Scrubber (CE6301-2) shall be maintained at or above 10 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Secondary Packed Bed Scrubber (CE6301-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to the Secondary Packed Bed Scrubber (CE6301-2), in gallons per minute, continuously. If the total liquor flow rate to the Secondary Packed Bed Scrubber (CE6301-2) falls below the value specified in Condition 5 C., the owner or operator shall investigate the Secondary Packed Bed Scrubber (CE6301-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Secondary Packed Bed Scrubber (CE6301-2) is not in operation.

D. The differential pressure drop across the Secondary Packed Bed Scrubber (CE6301-2) shall be maintained between 1 and 21 inches water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Secondary Packed Bed scrubber (CE6301-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across the Secondary Packed Bed Scrubber (CE6301-2), in inches of water, continuously. If the pressure drop across the Secondary Packed Bed Scrubber (CE6301-2) falls outside the range specified in Condition 5 D., the owner or operator shall investigate the Secondary Packed Bed Scrubber (CE6301-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Secondary Packed Bed Scrubber (CE6301-2) is not in operation.

E. The owner or operator shall develop an operating and maintenance plan for the Secondary Packed Bed Scrubber (CE6301-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Packed Bed Scrubber (CE 6301-2).

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

F. The total liquor flowrate of Distillation Packed Bed Scrubber (CE1120-1) shall be maintained at or above 14.5 gallons per minute.

i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Distillation Packed Bed Scrubber (CE1120-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the total liquor flow rate to the Distillation Packed Bed Scrubber (CE1120-1), in gallons per minute, continuously. If the total liquor flow rate to the Distillation Packed Bed Scrubber (CE1120-1) falls below the value specified in Condition 5F., the owner or operator shall investigate the Secondary Packed Bed Scrubber (CE1120-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Secondary Packed Bed Scrubber (CE1120-1) is not in operation.

G. The differential pressure drop across the Distillation Packed Bed Scrubber (CE1120-1) shall be maintained between 1 and 6 inches water column.

i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Distillation Packed Bed Scrubber (CE1120-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the pressure drop across the Distillation Packed Bed Scrubber (CE1120-1), in inches of water, continuously. If the pressure drop across the Distillation Packed Bed Scrubber (CE1120-1) falls outside the range specified in Condition 5G., the owner or operator shall investigate the Distillation Packed Bed Scrubber (CE1120-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Distillation Packed Bed Scrubber (CE1120-1) is not in operation.

H. The owner or operator shall develop an operating and maintenance plan for the Distillation Packed Bed Scrubber (CE1120-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Distillation Packed Bed Scrubber (CE1120-1).

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

Control Equipment-RTO

I. The owner or operator shall maintain a Regenerative Thermal Oxidizer (CE6301-3) combustion chamber temperature to no less than 1600 degrees Fahrenheit based on a 3-hour block average.

i. The owner or operator shall properly operate and maintain equipment to monitor the chamber temperature of Regenerative Thermal Oxidizer (CE6301-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

ii. The owner or operator shall collect and record the combustion chamber temperature of Regenerative Thermal Oxidizer (CE6301-3), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of Regenerative Thermal Oxidizer (CE6301-3) falls below the value specified in Condition 5I, the owner or operator shall investigate Regenerative Thermal Oxidizer (CE6301-3) and make corrections Regenerative Thermal Oxidizer (CE6301-3). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Regenerative Thermal Oxidizer (CE6301-3) is not in operation.

J. The owner or operator shall combust only natural gas or process off-gasses in Regenerative Thermal Oxidizer (CE6301-3).

K. The owner or operator shall develop an operating and maintenance plan for the Regenerative Thermal Oxidizer (CE6301-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Regenerative Thermal Oxidizer (CE6301-3).

Project Completion

L. The owner or operator shall permanently cease operation and decommission the equipment specified in Table 1 within 30 days upon the startup date of equipment specified in condtion 3.

i. The owner or operator shall maintain a record of the date that the equipment specified in Table 1 of have permanently ceased operation and have been decommissioned.

Table 1: Decomisioned Equipment List

Emission Unit Description	EU ID
Mash Fermenters Nos. 1-23	EU6301.0 – EU6323.0
Alcohol Columns Nos. 1-4	EU1086.0 -EU1089.0
Extractive Distillation Column Nos. 3-4	EU191.0 –EU1092.0
Stripper Column	EU1093.0

5. Operating Requirements with Associated Monitoring and Recordkeeping (continued)

k. The owner or operator shall vent all equipment to the control equipment specified in condition 3 at all times when the equipment is exhausting to the atmosphere. This condition is not applicable when the equipment is not in operation.

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

10. Construction (continued)

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

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11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

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12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
(1) Per 567 IAC 22.3(3)"b":
(a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
(b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
(2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
(b) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
(c) At least seven (7) days before equipment relocation.

12. Notification, Reporting, and Recordkeeping (continued)

(3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
- The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.

(4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
- The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
(1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
(2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
(3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.
(4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

(5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9549 Fax: (515) 725-9502	DNR Field Office 6 1023 West Madison Washington, IA 52353 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Mash Fermenters Nos. 24-33 with Primary Impinjet/Packed Bed Scrubber and Secondary Packed Bed Scrubber (EP544.0)

Permit No.	Project No.	Description	Date	Stack Testing
05-A-926	05-645	Original Permit.	12/02/2005	No
05-A-926-S1	06-168	Correct Permit, Emissions Increase.	07/24/2006	Yes
05-A-926-S2	07-094	Modify VOC and PM Emission Limits.	06/14/2007	No
05-A-926-S3	08-069	Increase Stack Height.	02/20/2008	No
05-A-926-S4	15-362	Add PM10, PM2.5, and SO2 emission limits	02/15/16	Yes
05-A-926-S5	16-149	Install 4 New Continuous Fermentation Vessels, Remove Existing Vessels 1-23	09/19/16	Yes

END OF PERMIT

Air Quality Construction Permit

Permit Number: 15-A-199-S1

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
Mick Durham
Manager of Environmental Services

(563) 264-4569
Mick.durham@grainprocessing.com

1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President, Operations

Permitted Equipment

Emission Point ID: EP WETFEED

Emission Unit(s) and Control Equipment:

EU ID	Description	Maximum Rated Capacity	Control Equipment Description and ID
EU1276.0	Wet Feed Pad and Loadout to Truck	1500 tons of wet feed per day Storage pile size of 10,500 ft^2	None

Equipment Location: 1600 Oregon Street
Muscatine, IA 52761

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Project Number	Project Description	Stack Testing	Issuance Date
20-259	Modify Operating Limit on Annual Throughput	No	01/11/21

Under the Direction of the Director of the
Department of Natural Resources

[JJC]

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PERMIT CONDITIONS

1. Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Pollutant	lb/hr[1]	tons/yr[2]	Other Limits	Reference/Basis
Particulate Matter (PM) – State	0.17[3]	NA	0.1 gr/dscf	567 IAC 23.4(7)
PM_{10}	0.068[3,4]	NA	NA	NAAQS
$PM_{2.5}$	0.038[5]	NA	NA	NAAQS
Opacity	NA	NA	40%[6]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	0.15[7]	NA	500 ppm_v	RACT and 567 IAC 23.3(3)"e"

[1] The emission limit is expressed as the average of three (3) runs.
[2] The emission limit is based on a twelve (12) month rolling total.
[3] The limits for PM and PM_{10} emissions are established to limit the unit's potential to emit.
[4] The emission limit used in facility wide PM_{10} dispersion modeling analysis that indicates predicted attainment of the PM_{10} National Ambient Air Quality Standards (NAAQS).
[5] The limit for $PM_{2.5}$ emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for $PM_{2.5}$ published in the Federal Register (76 FR 9706) on February 22, 2011.
[6] The emission limit is a six (6) minute average.
[7] The SO_2 limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO_2 primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).

2. Compliance Demonstration(s)

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
$PM_{2.5}$	None	NA	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9
SO_2	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C

If an initial stack test is specified in the "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 within the applicable time period specified below:

- Within sixty (60) days after achieving the maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within ninety (90) days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in "Compliance Demonstration Table," the owner or the owner's authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 as specified in the "Compliance Demonstration Table." See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

2. Compliance Demonstration(s) (Continued)

If stack testing is required, the owner or the owner's authorized agent shall use the test method and run time listed in the "Compliance Demonstration Table" unless another testing methodology is approved by the Department prior to testing.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Per 567 IAC 25.1(7)"a", at the Department's request, a pretest meeting shall be held not later than fifteen (15) days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department no later than fifteen (15) days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. A representative of the Department shall be allowed to witness the test(s). The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports. The unit(s) being sampled shall be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

3. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height (feet from the ground)	*
Discharge Style	*
Stack Outlet Dimensions (inches)	*
Exhaust Temperature (°F)	*
Exhaust Flowrate (scfm)	*

*There is no stack on this emission unit.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

4. Federal Standards

A. New Source Performance Standards (NSPS):

This emission unit is not subject to any NSPS subparts at this time as there are no applicable subparts for its source category.

NOTE: The absence of the inclusion of any NSPS requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS conditions.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

This emission unit is not subject to any NESHAP subparts at this time as there are no applicable subparts for its source category.

NOTE: The absence of the inclusion of any NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NESHAP conditions.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The moisture content of the wet feed handled and loaded out shall not be less than 10%. The owner or operator shall maintain records on any analysis done on the moisture content of the wet feed.

B. The amount of wet feed loaded out shall not exceed 100,000 tons in any rolling 12-month period.

i. The owner or operator shall maintain the following monthly records for the Wet Feed Loadout (EU1276.0):

a. The amount of wet feed loaded out, in tons; and

b. The rolling 12-month total of the amount of wet feed loaded out, in tons.

6. Continuous Emission Monitoring Systems (CEMS)

Continuous emission monitoring is not required by this permit at this time.

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 – 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment (567 IAC 22.3(3)"f").

10. Construction

A. General Requirements:
It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:
(1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
(2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
(3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:
The owner or operator shall amend this permit or amendment prior to startup of the equipment if:
(1) Any changes are made to the final plans and specifications submitted for the proposed project; or
(2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:
The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:
(1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
(2) This current amendment becomes void.

11. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shut down within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

A. The owner or operator shall furnish the Department the following written notifications:
   (1) Per 567 IAC 22.3(3)"b":
      (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration.
      (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation.
   (2) Per 567 IAC 22.3(3)"f," when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
      (a) At least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
      (b) At least seven (7) days before equipment relocation.
   (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall include the following information:
      - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
   (4) Unless specified per a federal regulation, the owner or the owner's authorized agent shall notify the Department in writing not less than thirty (30) days before a required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
      - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.

      If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

B. The owner or operator shall furnish the Department with the following reports:
   (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
   (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
   (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 24.1.
   (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.
   (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.

C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)

D. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

Air Quality Bureau Iowa Department of Natural Resources 502 E. 9th St. Des Moines, IA 50319 Telephone: (515) 725-8200 Fax: (515) 725-9501	DNR Field Office 6 1023 West Madison Washington, IA 52353-1623 Telephone: (319) 653-2135 Fax: (319) 653-2856

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Permit No.	Project No.	Description	Date	Stack Testing
15-A-199	15-050	Permit Source	12/10/15	No

END OF PERMIT