Air Quality Construction Permit

Permit Number: 17-A-112

Plant Number: 70-01-004

Company: Grain Processing Corporation

Contact Person:
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Director of Environmental Services

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1600 Oregon Street
Muscatine, IA 52761

Responsible Party:
Ron Zitzow
Senior Vice President

1600 Oregon Street
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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)	
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)		Regenerative Thermal Oxidizer RTO (CE6301-3), Maximum Heat Input: 1.5 MMBtu per hour (natural gas fired only)
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 (°F)	250 °F
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)
	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
Equipment Leaks	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)
Fermentation & Distillation	FFFF	Miscellaneous Organic Chemical Manufacturing	(1), (2)	23.1(4)"cf"	§63.2435 – §63.2550
Equipment Leaks	FFFF	Miscellaneous Organic Chemical Manufacturing	(3)	23.1(4)"cf"	§63.2435 – §63.2550

(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