

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: Flint Hills Resources Fairbank, LLC

Facility Location: 1277 102nd Street, Fairbank, Iowa 50629

Air Quality Operating Permit Number: 15-TV-010

Expiration Date: 6/9/2020

Permit Renewal Application Deadline: 12/9/2019

EIQ Number: 92-6958

Facility File Number: 10-04-007

Responsible Official

Name: Garland Krabbenhoft

Title: Plant Manager

**Mailing Address: 1277 102nd Street
Fairbank, Iowa 50629**

Phone #: 319-635-9435

Permit Contact Person for the Facility

Name: Kevin Mercy

Title: Environmental Manager

**Mailing Address: 1277 102nd Street
Fairbank, Iowa 50629**

Phone #: 319-635-9411

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Lori Hanson, Supervisor of Air Operating Permits Section

Date

Table of Contents

I. Facility Description and Equipment List	5
II. Plant - Wide Conditions.....	8
III. Emission Point Specific Conditions	11
IV. General Conditions.....	70
G1. Duty to Comply	
G2. Permit Expiration	
G3. Certification Requirement for Title V Related Documents	
G4. Annual Compliance Certification	
G5. Semi-Annual Monitoring Report	
G6. Annual Fee	
G7. Inspection of Premises, Records, Equipment, Methods and Discharges	
G8. Duty to Provide Information	
G9. General Maintenance and Repair Duties	
G10. Recordkeeping Requirements for Compliance Monitoring	
G11. Evidence used in establishing that a violation has or is occurring.	
G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification	
G13. Hazardous Release	
G14. Excess Emissions and Excess Emissions Reporting Requirements	
G15. Permit Deviation Reporting Requirements	
G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations	
G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification	
G18. Duty to Modify a Title V Permit	
G19. Duty to Obtain Construction Permits	
G20. Asbestos	
G21. Open Burning	
G22. Acid Rain (Title IV) Emissions Allowances	
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements	
G24. Permit Reopenings	
G25. Permit Shield	
G26. Severability	
G27. Property Rights	
G28. Transferability	
G29. Disclaimer	
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification	
G31. Prevention of Air Pollution Emergency Episodes	
G32. Contacts List	
V. Appendix A: 40 CFR Part 60, Subpart A: Web Link to New Source Performance Standards General Conditions.....	84

VI. Appendix B: 40 CFR Part 60, Subpart Db: Web Link to New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units.....85

VII. Appendix C: 40 CFR Part 63, Subpart ZZZZ: Web Link to National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines.....86

VIII. Appendix D: 40 CFR Part 60, Subpart Kb: Web Link to New Source Performance Standards for Volatile Organic Liquid Storage Vessels (including petroleum liquids).....87

IX. Appendix E: 40 CFR Part 60, Subpart VV: Web Link to New Source Performance Standards for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.....88

X. Appendix F: 40 CFR Part 63, Subpart FFFF: Web Link to National Emissions Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.....89

Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE.....	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP.....	emission point
EU.....	emission unit
gr./dscf.....	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification system
NSPS.....	new source performance standard
ppmv.....	parts per million by volume
lb./hr.....	pounds per hour
lb./MMBtu.....	pounds per million British thermal units
SCC.....	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC.....	Standard Industrial Classification
TPY.....	tons per year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....particulate matter
PM₁₀.....particulate matter ten microns or less in diameter
SO₂.....sulfur dioxide
NO_x.....nitrogen oxides
VOC.....volatile organic compound
CO.....carbon monoxide
HAP.....hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Flint Hills Resources Fairbank, LLC

Permit Number: 15-TV-010

Facility Description: Industrial Organic Chemicals (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP S20	EU P20	Grain Receiving/Handling System	05-A-007-S1
	EU P20a	Grain Bin	
	EU P20b	Grain Bin	
EP S25	EU P25a	Grain Bin	07-A-271
	EU P25b	Grain Bin	
EP S30	EU P30	Milling/Hammermills	05-A-008-S1
EP S10	EU 62	Dryer A	05-A-006-S7
	EU 63	Dryer B	
	EU 64	Dryer C	
	EU 65	Dryer D	
	EU B10a	Heat Recovery Boiler A	
	EU B10b	Heat Recovery Boiler B	
	EU 19	Slurry Tank #1	
	EU 20	Slurry Tank #2	
	EU 21	Cook Tubes #1	
	EU 22	Cook Tubes #2	
	EU 23	Cook Flash Vessel	
	EU 24	Liquefaction Tank #1	
	EU 25	Liquefaction Tank #1	
	EU 33	Molecular Sieve Vaporizer	
	EU 34-EU 39	Molecular Sieve Bottles #1-#6	

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP S10	EU 40	200 Proof Condenser	05-A-006-S7
	EU 41	200 Proof Flash Vessel	
	EU42	200 Proof Flash Receiver	
	EU 43	CIP Screen Tank	
	EU 44	Yeast Tank #1	
	EU 45	Yeast Tank #2	
	EU 46	Beer Column	
	EU 48	Side Stripper	
	EU 49	Rectifier Column	
	EU 50	190 Proof Condenser	
	EU 51	Reflux Tank	
	EU 52	Regen Tank	
	EU 53	Acid Wash Tank	
	EU 54	Centrate Tank #1	
	EU 55	Centrate Tank #2	
	EU 56	Centrifuges	
	EU 57	Evaporators	
	EU 58	Biomethanator #1	
	EU 59	Biomethanator #2	
	EU 60	Biomethanator #3	
EU 61	Biomethanator #4		
EP S40	EU 26	Fermenter #1	05-A-010-S6
	EU 27	Fermenter #2	
	EU 28	Fermenter #3	
	EU 29	Fermenter #4	
	EU 30	Fermenter #5	
	EU31	Fermenter #6	
	EU 32	Fermenter #7	
	EU 47	Beer Well	
EP S70	EU P70	DDGS Cooler	05-A-011-S4
EP S90	EU P90	DDGS- Loading Trucks/Railcars	05-A-009-S1
EP SEP22	EU F50	Ethanol Loadout by Truck/Rail	05-A-013-S2
EP 11	EU 11	Biomethanator Flare	05-A-020-S2
EP S80	EU P80	Cooling Tower	05-A-012-S1

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP F61	EU T61	Denatured Ethanol Storage Tank	05-A-014
EP F62	EU T62	Denatured Ethanol Storage Tank	05-A-015
EP F63	EU T63	200 Proof Ethanol Storage Tank	05-A-016
EP F64	EU T64	Denaturant Storage Tank	05-A-017
EP F65	EU T65	190 Proof Ethanol Storage Tank	05-A-018
EP FP	EU FP	Fire Water Pump	05-A-022-S2
EP F110	EU F110	VOC Emissions from Equipment Leaks	05-A-019-S1
EP F120	EU F120	Truck Traffic	05-A-021-S3
EP F130	EU F130	WDGS Storage & Loadout	07-A-272-S1
EP S150	EU S150	Whole Stillage Tank	13-A-557
EP F150	EU F150	Open Transportation Devices	14-A-460

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
TS-8411	Corrosion Inhibitor Tank (2,300 gal)
TF-6801	Thin Stillage Tank (374,000 gal.)
TF-6810	Syrup Tank (180,000 gal)
TF-2101	Cook Water Tank (374,000 gal)
TF-2112	Methanator Feed Tank (374,000 gal)
TP-12401	Ammonia Tank (18,000 gal)
TP-12501	Sulfuric Acid Tank (8,000 gal)
S200	Diesel Tank (1,000 gal)
S201	Fire Pump Diesel Tank (360 gal)
S202	Portable Diesel Tank (500 gal)
S203	Gasoline Tank (500 gal)
TK-13800A	Corn Oil Tank 1 (20,000 gal)
TK-13800B	Corn Oil Tank 2 (20,000 gal)
S-204	Corn Oil Loadout (0.16 psi)
S206	Corn Oil Vent (0.16 psi)
S205	Parts Washer (30 gal)

II. Plant-Wide Conditions

Facility Name: Flint Hills Resources Fairbank, LLC
Permit Number: 15-TV-010

Permit conditions are established in accord with 567 Iowa Administrative Code Rule 22.108

Permit Duration

The term of this permit is: Five (5) years
Commencing on: 6/10/2015
Ending on: 6/9/2020

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"

NESHAP and NSPS

40 CFR 60 Subpart Db Requirements

This facility is subject to Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. It is also subject to the General Provisions of Subpart A. The affected units are EU B10a and B10b. See Appendix A for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart Db
567 IAC 23.1(2) "ccc"

40 CFR 60 Subpart Kb Requirements

This facility is subject to the Standards of Performance for Volatile Organic Liquid storage vessels (including petroleum liquids). This is applicable for storage tanks constructed after July 1984. It is also subject to the General Provisions of Subpart A. The affected units are storage tanks T61, T62, T63, T64 and T65. See Appendix C for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart Kb
567 IAC 23.1(2) "ddd"

40 CFR 60 Subpart VV Requirements

This facility is subject to the Standards of Performance for Equipment leaks of VOC in the Synthetic Organic Chemicals Manufacturing industry. It is also subject to the General Provisions of Subpart A. The affected units are EUs 26 through 42, EUs 48 through 52, F50, T61 through T65 and F110. See Appendix E for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart VV
567 IAC 23.1(2) "nn"

40 CFR 63 Subpart ZZZZ Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants for *Stationary Reciprocating Internal Combustion Engines* (RICE NESHAP). It is also subject to the General Provisions - Subpart A. The affected unit is FP.

See Appendix C for a link to the Standard.

Authority for Requirements: 40 CFR 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

40 CFR 63 Subpart FFFF Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) for *Miscellaneous Organic Chemical Manufacturing*. It is also subject to the General Provisions - Subpart A. The affected units are sources vented through EP S10, EP S40 and EP F110.

See Appendix F for a link to the Standard.

Authority for Requirements: 40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

III. Emission Point-Specific Conditions

Facility Name: Flint Hills Resources Fairbank, LLC
 Permit Number: 15-TV-010

Emission Point ID Number: EP S20

Associated Emission Unit ID Numbers: See Table: Grain Receiving and Storage
 Emissions Control Equipment ID Number: See Table: Grain Receiving and Storage
 Emissions Control Equipment Description: See Table: Grain Receiving and Storage

Table: Grain Receiving and Storage

Emission Unit	Emissions Control ID Number	Emissions Control Equipment Description	Emissions Unit Description	Raw Material/Fuel	Rated Capacity
EU P20	C20	Baghouse	Grain Receiving/Handling System	Grain	20,000 bu/hr/leg
EU P20a			Grain Bin	Grain	500,000 bu
EU P20b			Grain Bin	Grain	500,000 bu

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"
 Iowa DNR Construction Permit 05-A-007-S1

⁽¹⁾ An exceedance of the indicator opacity of “no visible emissions” will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: 567 IAC 23.4(7)
Iowa DNR Construction Permit 05-A-007-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.59 lb/hr⁽³⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-007-S1

Pollutant: PM-10
Emission Limit(s): 1.59 lb/hr⁽³⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-007-S1

⁽³⁾ The emission limit is expressed as the average of three (3) runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

- A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.
- B. The grain bins shall be maintained at negative pressure at all times that the bins are in operation.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 05-A-007-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40
Stack Opening, (inches, dia.): 48
Exhaust Flow Rate (scfm): 41,800
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 05-A-007-S1

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department within 30 days of the discovery and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Stack Testing:

Pollutant – Particulate Matter (PM₁₀)
Stack Test to be completed by 6/9/2017
Test Method - 40 CFR 51, Appendix M, 201A with 202 or DNR approved Method
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)
Stack Test to be completed by 6/9/2017
Test Method – 40 CFR 60, Appendix A, Method 5
40 CFR 51, Appendix M, Method 202 or DNR approved Method
Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S25

Associated Emission Unit ID Numbers: See Table: Grain Storage Bins

Emissions Control Equipment ID Number: See Table: Grain Storage Bins

Emissions Control Equipment Description: See Table: Grain Storage Bins

Table: Grain Storage Bins

Emission Unit	Emissions Control ID Number	Emissions Control Equipment Description	Emissions Unit Description	Raw Material/Fuel	Rated Capacity
EU P25a	C25	Baghouse	Grain Storage Bin	Grain	684,000 bu
EU P25b			Grain Storage Bin	Grain	684,000 bu

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 07-A-271

⁽¹⁾An exceedance of the indicator opacity of 25% will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.4(7)
Iowa DNR Construction Permit 07-A-271

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.28 lb/hr⁽³⁾⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit 07-A-271

Pollutant: PM-10

Emission Limit(s): 1.28 lb/hr⁽³⁾⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit 07-A-271

⁽³⁾ Standard is expressed as the average of 3 runs.

⁽⁴⁾ Emission rate based on 0.1 gr/dscf.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

- A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 07-A-271

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30

Stack Opening, (inches, dia.): 15

Exhaust Flow Rate (scfm): 1,500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical without rain cap or with unobstructing rain cap.

Authority for Requirement: Iowa DNR Construction Permit 07-A-271

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S30

Associated Equipment

Associated Emission Unit ID Numbers: EU P30
Emissions Control Equipment ID Number: C30
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU P30
Emission Unit Description: Milling/Hammermill
Raw Material/Fuel: Grain
Rated Capacity: 4 Hammermills, 1,500 bushels/hr. each

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 05-A-008-S1

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.4(7)
Iowa DNR Construction Permit 05-A-008-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.75 lb/hr⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-008-S1

Pollutant: PM-10

Emission Limit(s): 1.75 lb/hr⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-008-S1

⁽³⁾ The emission limit is expressed as the average of three (3) runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

- A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 05-A-008-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40

Stack Opening, (inches, dia.): 48.1

Exhaust Flow Rate (scfm): 27,350

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-008-S1

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department within 30 days of the discovery and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Stack Testing:

Pollutant – Particulate Matter (PM₁₀)

Stack Test to be completed by 6/9/2017

Test Method - 40 CFR 51, Appendix M, 201A with 202 or DNR approved Method

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)
Stack Test to be completed by 6/9/2017
Test Method – 40 CFR 60, Appendix A, Method 5
40 CFR 51, Appendix M, Method 202 or DNR approved Method
Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S10

Associated Emission Unit ID Numbers: See Table: Dryers, Boilers and Distillation

Emissions Control Equipment ID Number: See Table: Dryers, Boilers and Distillation

Emissions Control Equipment Description: See Table: Dryers, Boilers and Distillation

Continuous Emissions Monitors ID Numbers: ME10

Table: Dryers, Boilers and Distillation

Emission Unit	Emissions Control ID Number	Emissions Control Equipment Description	Continuous Emissions Monitors ID Numbers	Emissions Unit Description	Raw Material/Fuel	Rated Capacity
EU 62	C10a	Thermal Oxidizer 1	ME10	DDGS Dryer A	Natural Gas/Biogas	54.4 MMBtu/hr
EU 63				DDGS Dryer B	Natural Gas	54.4 MMBtu/hr
EU 64	C10b	Thermal Oxidizer 2		DDGS Dryer C	Natural Gas	54.4 MMBtu/hr
EU 65				DDGS Dryer D	Natural Gas	54.4 MMBtu/hr
EU B10a	Note: Units recover heat from the TO's, located post-control			Heat Recovery Boiler A	Heat	147.4 MMBtu/hr
EU B10b				Heat Recovery Boiler B	Heat	147.4 MMBtu/hr

Distillation Process

EU 19	Thermal Oxidizer 1 (C10a) or Thermal Oxidizer 2 (C10b)	ME10	Slurry Tank #1	Mash	25,000 gallons
EU 20			Slurry Tank #2	Mash	29,000 gallons
EU 21			Cook Tubes #1	Mash	3,500 gallon/min
EU 22			Cook Tubes #2	Mash	3,500 gallon/min
EU 23			Cook Flash Vessel	Mash	2,385 gallon/min
EU 24			Liquefaction Tank #1	Mash	128,400 gallons
EU 25			Liquefaction Tank #2	Mash	128,400 gallons

Table: Dryers, Boilers and Distillation

Emission Unit	Emissions Control ID Number	Emissions Control Equipment Description	Continuous Emissions Monitors ID Numbers	Emissions Unit Description	Raw Material/Fuel	Rated Capacity
EU 33	Thermal Oxidizer 1 (C10a) or Thermal Oxidizer 2 (C10b)		ME10	Molecular Sieve Vaporizer	Ethanol	1,025 gallon/min
EU 34- EU 39				Molecular Sieve Bottles #1- #6	Ethanol	1,025 gallon/min
EU 40				200 Proof Condenser	Ethanol	665 gallon/min
EU 41				200 Proof Flash Vessel	Ethanol	1,025 gallon/min
EU 42				200 Proof Flash Receiver	Ethanol	1,025 gallon/min
EU 43				CIP Screen/Tank	CIP	25,000 gallons
EU 44				Yeast Tank #1	Yeast	20,000 gallons
EU 45				Yeast Tank #2	Yeast	20,000 gallons
EU 46				Beer Column	Beer	2,350 gallon/min
EU 48				Side Stripper	Ethanol	1,650 gallon/min
EU 49				Rectifier Column	Ethanol	680 gallon/min
EU 50				190 Proof Condenser	Ethanol	1,967 gallon/min
EU 51				Reflux Tank	Ethanol	1,240 gallons
EU 52				Regen Tank	Ethanol	1,240 gallons

Table: Dryers, Boilers and Distillation

Emission Unit	Emissions Control ID Number	Emissions Control Equipment Description	Continuous Emissions Monitors ID Numbers	Emissions Unit Description	Raw Material/Fuel	Rated Capacity
EU 53	Thermal Oxidizer 1 (C10a) or Thermal Oxidizer 2 (C10b)		ME10	Acid Wash Tank	Acid Wash	14,200 gallons
EU 54				Centrate Tank #1	Centrate	1,690 gallons
EU 55				Centrate Tank #2	Centrate	1,690 gallons
EU 56				Centrifuges	Whole Stillage	3,100 gallon/min
EU 57				Evaporators	Thin Stillage	1,650 gallon/min
EU 58	These units may be vented to Dryer A and the combustible gases are burned there before the exhaust is emitted through the thermal oxidizers and out the stack. If these units are not vented through Dryer A, they shall be vented to the flare associated with EP 11.		ME10* *Only when vented to Dryer A	Biomethanator #1	Process Water	30,000 gallons
EU 59				Biomethanator #2		30,000 gallons
EU 60				Biomethanator #3		30,000 gallons
EU 61				Biomethanator #4		30,000 gallons

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 05-A-006-S7

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.4(7)

Iowa DNR Construction Permit 05-A-006-S7

Pollutant: Particulate Matter (PM)

Emission Limit(s): 7.36 lb/hr⁽³⁾⁽⁵⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-006-S7

Pollutant: PM-10

Emission Limit(s): 7.36 lb/hr⁽³⁾⁽⁵⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-006-S7

Pollutant: PM-2.5

Emission Limit(s): 7.36 lb/hr⁽³⁾⁽⁶⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-006-S7

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 16.67 lb/hr⁽³⁾⁽⁵⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-006-S7

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Iowa DNR Construction Permit 05-A-006-S7

Pollutant: Nitrogen Oxides (NO_x)

Emission Limits: 27.5 lb/hr⁽³⁾⁽⁷⁾⁽⁸⁾ and 96.58 tons/yr⁽⁴⁾⁽⁷⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-006-S7

Pollutant: Nitrogen Oxides (NO_x)

Emission Limits: 0.1 lb/MMBtu⁽⁸⁾

Authority for Requirement: 40 CFR §60.44b

567 IAC 23.1(2)"ccc"

Iowa DNR Construction Permit 05-A-006-S7

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 4.17 lb./hr⁽³⁾⁽⁵⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-006-S7

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 21.40 lb./hr⁽³⁾⁽⁵⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-006-S7

Pollutant: Total HAP
Emission Limit(s): 20 ppmv⁽⁹⁾
Authority for Requirement: 40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
Iowa DNR Construction Permit 05-A-006-S7

⁽³⁾ The emission limit is expressed as the average of three (3) runs.

⁽⁴⁾ The emission limit is a twelve (12) month rolling total.

⁽⁵⁾ Emission limits were established to limit facility's PTE to remain minor for PSD is Project #06-647.

⁽⁶⁾ Emission limits were established to limit facility's PTE in Project #14-132.

⁽⁷⁾ Emission limits were established to limit facility's PTE to remain minor for PSD in Project #14-132.

⁽⁸⁾ Compliance is determined on a 30-day rolling average basis, and applies at all times, including periods of startup, shutdown, and malfunction. – 40 CFR 60.44b(h), (i), and (l).

⁽⁹⁾ Actual limit from the MON MACT (40 CFR 63 Subpart FFFF) is 98% or more reduction of total organic HAP or no more than 20 ppmv total organic HAP in the exhaust stream.

NESHAP and NSPS

The distillation process is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing (40 CFR 63 Subpart FFFF; 567 IAC 23.1(4)"cf"). The distillation process is also subject NESHAP General Provisions (40 CFR 63 Subpart A; 567 IAC 23.1(4)"a")

Authority for Requirement: Iowa DNR Construction Permit 05-A-006-S7
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

The thermal oxidizer/heat recovery boiler system is subject to the New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60 Subpart Db; 567 IAC 23.1(2)"ccc" and the General Provisions (40 CFR Part 60 Subpart A; 567 IAC 23.1(2)).

Authority for Requirement: Iowa DNR Construction Permit 05-A-006-S7
40 CFR 60 Subpart Db
567 IAC 23.1(2)"ccc"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

- A. Each thermal oxidizer shall maintain a temperature (daily average) during operation at or above the average temperature of the oxidizer recorded during the most recent performance test which demonstrated compliance with the emission limits.
- B. The thermal oxidizers shall be operated at all times the dryers or distillation equipment is being used.
- C. The dryers or thermal oxidizers shall combust only natural gas and/or process offgases.
- D. The heat recovery boilers shall not combust any supplemental fuel.
- E. The control equipment shall be inspected and maintained according the facility's (Plant ID 10-04-007) operation and maintenance plan.
- F. The owner or operator shall follow the applicable standards of Subpart Db, 40 CFR §60.40b through §60.49b.
- G. As required by 40 CFR §63.2450(e)(1), the owner or operator of this equipment shall comply with the requirements of 40 CFR §63.982(c). This also requires the owner or operator to comply with the requirements of 40 CFR §63.988 and any other applicable referenced requirement.
- H. As required by 40 CFR §63.6(e), the facility shall develop and implement a written startup, shutdown and malfunction plan (SSMP) unless otherwise exclude within the applicable standards.

Reporting & Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall keep record of the total production of denatured ethanol (in gallons) on a 12-month rolling period basis.
- B. The owner or operator shall keep records of control equipment inspections and maintenance.
- C. The owner or operator shall keep hourly records of the operating temperature of each thermal oxidizer.
- D. The owner or operator shall keep records of the frequency and amount of time the thermal oxidizer malfunctions, and estimate the emissions emitted during said malfunctions.
- E. The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day, and calculate the annual capacity factor on a 12 month rolling average basis with a new annual capacity factor calculated at the end of each calendar month, as required in 40 CFR 60.49b(d) for the thermal oxidizer/waste heat boiler. The annual capacity factor is defined as the ratio between the actual heat input to a steam generating unit during a calendar year, and the potential heat input had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.
- F. The owner or operator shall maintain records of the following information for each steam generating unit operating day, as required in 40 CFR 60.49b(g). This information shall also

be submitted in a report, as required in 40 CFR 60.49b(i).

1. Calendar date.
2. Average hourly nitrogen oxides emission (as NO₂) rates measured.
3. 30-day average nitrogen oxides emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
4. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the emission standard, with the reason for such excess emissions as well as a description of corrective actions taken.
5. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
6. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
7. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
8. Identification of the times when the pollutant concentrations exceeded the full span of the continuous monitoring system.
9. Description of any modifications to the continuous monitoring system that could affect the ability of the CEMS to comply with # 2 or 3 above.
10. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Appendix F, Procedure 1.

G. In accordance with 40 CFR §63.2450(e) and as indicated in 40 CFR §63.982(c), the owner or operator shall comply with the applicable recordkeeping requirements in 40 CFR §63.999 for control devices used in closed vent systems.

H. The owner or operator shall comply with the notification, reporting, and recordkeeping requirements as outlined in 40 CFR §63.2515, §63.2520, and §63.2525, respectively.

Authority for Requirement: DNR Construction Permit 05-A-006-S7

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 125

Stack Opening (inches, dia.): 120

Exhaust Flow Rate (scfm): 153,400

Exhaust Temperature (°F): 277

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 05-A-006-S7

The temperature and flow rate 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 design characteristics are different than the values stated above, the

owner/operator must notify the Department within 30 days of the discovery and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant – Particulate Matter (PM₁₀)

1st Stack Test to be completed by 6/9/2017

Test Method - 40 CFR 51, Appendix M, 201A with 202 or DNR approved Method

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)

1st Stack Test to be completed by 6/9/2017

Test Method – 40 CFR 60, Appendix A, Method 5

40 CFR 51, Appendix M, Method 202 or DNR approved Method

Authority for Requirement – 567 IAC 22.108(3)

Pollutant - VOC

Stack Test to be Completed by 7/29/2016⁽¹⁾

Test Method – 40 CFR 60 Appendix A, Method 18, Method 320 or other approved method

Authority for Requirement – Iowa DNR Construction Permit 05-A-006-S7

Pollutant - HAP

Stack Test to be Completed by 7/29/2016⁽¹⁾

Test Method – 40 CFR 60, Appendix A, Method 18, Method 320 or other approved method

Authority for Requirement – Iowa DNR Construction Permit 05-A-006-S7

Pollutant - CO

Stack Test to be Completed by ⁽²⁾

Test Method – 40 CFR 60 Appendix A, Method 10 or DNR approved Method

Authority for Requirement – Iowa DNR Construction Permit 05-A-006-S7

- (1) This is the **latest** date for the next test. The construction permit states that “Testing for VOC and Total Organic HAP shall both be conducted each time testing is required to be completed. Testing shall be completed on the schedule required by the NESHAP (40 CFR 63 Subpart FFFF) or at a minimum of once every 3 years. Testing, if not required under the NESHAP (40 CFR 63 Subpart FFFF) shall be completed in the months of June, July or August.”
- (2) Testing for CO shall be completed annually with at least 6 months between testing.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Continuous Emissions Monitoring:

The owner or operator shall install, calibrate, maintain and operate a continuous monitoring system, and record the output of the system, for measuring **nitrogen oxide** emissions discharged to the atmosphere. The CEM shall be operated and data collected as required under 40 CFR 60.48b(c), (d), (e) and (f). The Nitrogen Oxide CEM is required to install a flow rate sensor per the requirements of 40 CFR Part 60 Appendix B: Performance Specification 6. The flow rate sensor is required to be installed within 90 days of the permit issuance date.

The following requirements shall apply to all CEMS for Non-NSPS emission standards in this permit:

- (1) The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission unit except for CEM breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
- (2) The 1-hour average NO_x emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards of this permit. At least 2 data points must be used to calculate each 1-hour average.
- (3) For each hour of missing NO_x emission data, the owner or operator shall substitute data by:
 - (i) If the monitor data availability is equal to or greater than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - (a) For the missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - (b) For a missing data period greater than 24 hours, substitute the greater of:
 - The 90th percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
 - The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - (ii) If the monitor data availability is at least 90.0% but less than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - (a) For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - (b) For the missing data period of more than 8 hours, substitute the greater of:
 - The 95th percentile hourly pollutant concentration recorded by a pollutant

concentration monitor during the previous 720 quality-assured monitor operating hours; or

- The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

(iii) If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S40

Associated Equipment

Associated Emissions Unit ID Numbers: See Table: Fermentation Process
 Emissions Control Equipment ID Number: See Table: Fermentation Process
 Emissions Control Equipment Description: See Table: Fermentation Process

Table: Fermentation Process

Emission Unit Number	Emission Unit Description	Control Equipment ID	Control Equipment Description	Raw Material/Fuel	Rated Capacity (gallons)
EU 26	Fermenter #1	C40	CO ₂ Scrubber	Mash	807,000
EU 27	Fermenter #2				807,000
EU 28	Fermenter #3				807,000
EU 29	Fermenter #4				807,000
EU 30	Fermenter #5				807,000
EU 31	Fermenter #6				807,000
EU 32	Fermenter #7				807,000
EU 47	Beer Well			Beer	1,080,000

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 05-A-010-S6

⁽¹⁾ An exceedance of the indicator opacity of “no visible emissions” will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: 567 IAC 23.4(7)
Iowa DNR Construction Permit 05-A-010-S6

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.20 lb/hr⁽³⁾⁽⁴⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-010-S6

Pollutant: PM-10
Emission Limit(s): 0.20 lb/hr⁽³⁾⁽⁵⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-010-S6

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 9.92 lb./hr⁽³⁾⁽⁶⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-010-S6

Pollutant: Total HAP
Emission Limit(s): 20 ppmv⁽⁷⁾
Authority for Requirement: 40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"
Iowa DNR Construction Permit 05-A-010-S6

⁽³⁾ The emission limit is expressed as the average of three (3) runs.

⁽⁴⁾ Emission limit was established to limit facility's PTE to remain minor for PSD in Project #04-728.

⁽⁵⁾ Emission limit was established in dispersion modeling to demonstrate no exceedance of NAAQS in Project #04-728.

⁽⁶⁾ Emission limit was established to limit facility's PTE to remain minor for PSD in Project #08-500

⁽⁷⁾ Emission limit is a 20 ppmv exhaust concentration or a reduction of total organic HAP by 98% or more.

NESHAP and NSPS

This source is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing (40 CFR 63 Subpart FFFF; 567 IAC 23.1(4)"cf"). This facility is also subject to the conditions of the General Provisions (40 CFR 63 Subpart A) as outlined in Table 12 of Subpart FFFF.

Authority for Requirement: Iowa DNR Construction Permit 05-A-010-S6
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

- A. The control device (C40) associated with this emission point shall be operated at all times process equipment associated with this emission point is in operation.
- B. The owner/operator shall install, operate and maintain equipment necessary to continuously monitor the water feed rate into the scrubber. This equipment shall be installed, operated, and maintained in accordance with the facility's (Plant ID 10-04-007) operations and maintenance plan.
- C. The owner/operator shall install, operate and maintain equipment necessary to continuously monitor the additive feed rate into the scrubber. This equipment shall be installed, operated, and maintained in accordance with the facility's (Plant ID 10-04-007) operations and maintenance plan.
- D. The owner/operator shall install, operate and maintain equipment necessary to continuously monitor the pressure drop across the scrubber. This equipment shall be installed, operated, and maintained in accordance with the facility's (Plant ID 10-04-007) operations and maintenance plan.
- E. The daily average water feed rate (in gallons per minute) into the scrubber shall be maintained at or above the average value observed during the most recent compliance test which demonstrate compliance with all applicable emission limits.
- F. The daily average additive feed rate (in milliliters per minute) into the scrubber shall be maintained at or above the average value observed during the most recent compliance test which demonstrated compliance with all applicable emission limits.

Note: Continuous monitoring of any parameters required to be monitored continuously shall meet the requirements of 40 CFR 63.998(b).

Work practice standards:

- A. As required by 40 CFR 63.2450(e)(1), the owner/operator of this equipment shall comply with the requirements of 40 CFR 63.982(c). This also requires the owner/operator to comply with the requirements of 40 CFR 63.988 and any other applicable referenced requirement.
- B. As required by 40 CFR 63.6(e), the facility shall develop and implement a written startup, shutdown and malfunction plan (SSMP) unless otherwise exclude within the applicable standards.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The owner/operator shall maintain all records required by the NESHAP Subpart FFFF and all applicable referenced requirements.
- B. The owner/operator shall continuously monitor and record the water feed rate (in gallons per minute) into the scrubber.

- C. The owner/operator shall continuously monitor and record the additive feed rate (in milliliters per minute) into the scrubber.
- D. The owner/operator shall continuously monitor and record the pressure drop across the scrubber (in inches of water column).

Authority for Requirement: Iowa DNR Construction Permit 05-A-010-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 15,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-010-S6

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department within 30 days of the discovery and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Stack Testing:

Pollutant - VOC

Stack Test to be Completed Semi-Annually with at least one of the tests being completed during the months of June, July, or August

Test Method – 40 CFR 60 Appendix A, Method 18, Method 320, or other approved method

Authority for Requirement – Iowa DNR Construction Permit 05-A-010-S6

Pollutant - HAP

Stack Test to be Completed by (date) ⁽¹⁾

Test Method – 40 CFR 60, Appendix A, Method 18, Method 320, or other approved method

Authority for Requirement – Iowa DNR Construction Permit 05-A-010-S6

⁽¹⁾ Testing for Total Organic HAP shall be completed on the schedule required by the NESHAP (40 CFR 63 Subpart FFFF).

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S70

Associated Equipment

Associated Emissions Unit ID Number: EU P70
Emissions Control Equipment ID Number: C70
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU P70
Emission Unit Description: DDGS Cooler
Raw Material/Fuel: DDGS
Rated Capacity: 45 tons/hr.

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%⁽¹⁾⁽²⁾
Authority for Requirement: 567 IAC 23.3(2)(d)
Iowa DNR Construction Permit 05-A-011-S4

⁽¹⁾ An exceedance of the indicator opacity of “no visible emissions” will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: 567 IAC 23.4(7)
Iowa DNR Construction Permit 05-A-011-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.67 lb/hr⁽³⁾⁽⁴⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-011-S4

Pollutant: PM-10
Emission Limit(s): 0.67 lb/hr⁽³⁾⁽⁴⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-011-S4

Pollutant: Volatile Organic Compounds (VOC) ⁽³⁾⁽⁴⁾

Emission Limit(s): 6.17 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 05-A-011-S4

⁽³⁾ The emission limit is expressed as the average of three (3) runs.

⁽⁴⁾ Emission limits set to maintain original plant permitting as a minor project for the PSD program.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

- A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: IDNR Construction Permit 05-A-011-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40

Stack Opening, (inches, dia.): 48

Exhaust Flow Rate (scfm): 23,500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-011-S4

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department within 30 days of the discovery and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Stack Testing:

Pollutant – Particulate Matter (PM₁₀)
1st Stack Test to be completed by 6/9/2017
Test Method - 40 CFR 51, Appendix M, 201A with 202 or DNR approved Method
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)
1st Stack Test to be completed by 6/9/2017
Test Method – 40 CFR 60, Appendix A, Method 5
40 CFR 51, Appendix M, Method 202 or DNR approved Method
Authority for Requirement – 567 IAC 22.108(3)

Pollutant - VOC
Stack Test to be completed by 11/18/2016⁽¹⁾
Test Method – 40 CFR 60 Appendix A, Method 25A or DNR approved Method
Authority for Requirement – Iowa DNR Construction Permit 05-A-011-S4

⁽¹⁾ And every three years thereafter.

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S90

Associated Equipment

Associated Emissions Unit ID Number: EU P90
Emissions Control Equipment ID Number: C90
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU P90
Emission Unit Description: DDGS-Loading Trucks/Railcars
Raw Material/Fuel: DDGS
Rated Capacity: 7,500 bushels/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)

Iowa DNR Construction Permit 05-A-009-S1

⁽¹⁾ An exceedance of the indicator opacity of “no visible emissions” will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.4(7)

Iowa DNR Construction Permit 05-A-009-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.89 lb/hr⁽³⁾⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-009-S1

Pollutant: PM-10

Emission Limit(s): 0.89 lb/hr⁽³⁾⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-009-S1

⁽³⁾ The emission limit is expressed as the average of three (3) runs.

⁽⁴⁾ Emission limits set to maintain original plant permitting as a minor project for the PSD program.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

- A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 05-A-009-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40

Stack Opening, (inches, dia.): 26.1

Exhaust Flow Rate (scfm): 9,100

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-009-S1

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

Stack Testing:

Pollutant – Particulate Matter (PM₁₀)

1st Stack Test to be completed by 6/9/2017

Test Method - 40 CFR 51, Appendix M, 201A with 202 or DNR approved Method

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)

1st Stack Test to be completed by 6/9/2017

Test Method – 40 CFR 60, Appendix A, Method 5

40 CFR 51, Appendix M, Method 202 or DNR approved Method
Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SEP22

Associated Equipment

Associated Emissions Unit ID Number: EU F50
Emissions Control Equipment ID Number: F50
Emissions Control Equipment Description: Flare

Emission Unit vented through this Emission Point: EU F50
Emission Unit Description: Ethanol Loadout by Truck/Rail
Raw Material/Fuel: Denatured Ethanol
Rated Capacity: 600 gpm by truck, 1,000 gpm by rail, Flare 6.4 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 05-A-013-S2

⁽¹⁾ An exceedance of the indicator opacity of “no visible emissions” will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 500 ppmv⁽³⁾⁽⁴⁾

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limits: 0.57 tons/yr⁽³⁾⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-013-S2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 6.05 tons/yr⁽³⁾⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-013-S2

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 3.08 tons/yr⁽³⁾⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-013-S2

⁽³⁾ The emission limit is a twelve (12) month rolling total.

⁽⁴⁾ Emission limits set to maintain original plant permitting as a minor project for the PSD program.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

- A. The total amount of denatured alcohol transported through the truck loading and rail loading shall not exceed 132,000,000 gallons per twelve-month rolling period.
- B. The total amount of switch-loading at the truck loadout shall not exceed 1,650,000 gallons per twelve-month rolling period. Switch loading is not allowed at the rail loadout.

Control equipment parameters:

- A. The control equipment shall be used whenever product is loaded through the rail or truck loadout.
- B. The flare shall be limited to operating 2,500 hours per twelve-month rolling period. (Note: the pilot light may operate 8760 hours per year).
- C. The flare shall be operated per the requirements of 60 CFR 60.18
- D. The control equipment shall be inspected and maintained according to manufacturer's recommendations.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. Record the total amount of denatured ethanol transported through the truck & rail loadout per twelve-month rolling period.
- B. Record the amount of product switch-loaded through the truck loadout per twelve-month rolling period.
- C. The owner or operator shall keep records as required in 40 CFR 60.486 and reports as required in 40 CFR 60.487.
- D. The owner or operator shall keep records of control equipment inspections and repairs.
- E. The owner or operator shall keep records of the number of hours the flare is operated per twelve-month rolling period.

Authority for Requirement: Iowa DNR Construction Permit 05-A-013-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30
Stack Opening, (inches, dia.): 60
Exhaust Flow Rate (scfm): 34,000
Exhaust Temperature (°F): 1,600
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 05-A-013-S2

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source’s compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 11

Associated Equipment

Associated Emissions Unit ID Number: EU 11
Emissions Control Equipment ID Number: C 11
Emissions Control Equipment Description: Flare

Emission Unit vented through this Emission Point: EU 11
Emission Unit Description: Biomethanotor Flare
Raw Material/Fuel: Biogas/Natural Gas
Rated Capacity: 6.4 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 05-A-020-S2

⁽¹⁾ An exceedance of the indicator opacity of “no visible emissions” will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limits: 0.38 tons/yr⁽³⁾⁽⁴⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-020-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.29 tons/yr⁽³⁾⁽⁴⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-020-S2

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 2.07 tons/yr⁽³⁾⁽⁴⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-020-S2

⁽³⁾ The emission limit is a twelve (12) month rolling total.

⁽⁴⁾ Emission limits set to maintain original plant permitting as a minor project for the PSD program.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:

- A. The flare shall be operated at all times that the dryers are not operating. Operation of the flare shall not exceed 1,752 hours per twelve-month rolling period. (Note: Pilot operating time is allowed to operate 8760 hours per year).

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. At the end of each month, record the number of hours the flare operated over the previous month.
- B. At the end of each month, record the number of hours the flare operated over the previous twelve (12) months.

Authority for Requirement: Iowa DNR Construction Permit 05-A-020-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 22.4

Stack Opening, (inches, dia.): 22

Exhaust Flow Rate (scfm): 230

Exhaust Temperature (°F): 1,500

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-020-S2

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S80

Associated Equipment

Associated Emissions Unit ID Number: EU P80
Emissions Control Equipment ID Number: C 80
Emissions Control Equipment Description: Mist Eliminators

Emission Unit vented through this Emission Point: EU P80
Emission Unit Description: Cooling Tower
Raw Material/Fuel: Cooling Water
Rated Capacity: 3,300,000 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"
Iowa DNR Construction Permit 05-A-012-S1

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 567 IAC 23.3(2)"a"
Iowa DNR Construction Permit 05-A-012-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 3.44 lb/hr⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-012-S1

Pollutant: PM-10

Emission Limit(s): 3.44 lb/hr⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-012-S1

⁽³⁾ The emission limit is expressed as the average of three (3) runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

- A. The circulating water in the cooling tower shall not exceed 2,500 parts per million (ppm) total dissolved solids (TDS). Monitoring of the TDS shall be conducted on a monthly schedule.
- B. Chromium based water treatment chemicals shall not be used in this emission unit.

Control equipment parameters:

- A. The cooling tower shall be operated and maintained per the manufacturer's specifications and instructions.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. Maintain records on-site of the TDS concentration in the cooling tower circulating water. Records shall also be kept of the dates of measurement and the methods used to determine the concentration of the TDS in the cooling water.
- B. Maintain records of all maintenance and repair to the cooling tower.
- C. The owner/operator shall maintain a copy of the MSDS or other vendor's documentation showing the composition of all water treatment chemicals used in the cooling tower.

Authority for Requirement: Iowa DNR Construction Permit 05-A-012-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 39.8

Stack Opening, (inches, dia.): 336

Exhaust Flow Rate (scfm): 4,088,000

Exhaust Temperature (°F): 84

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-012-S1

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department within 30 days of the discovery and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Storage Tanks

Associated Equipment

Associated Emission Unit ID Numbers: See Table: Storage Tanks

Emissions Control Equipment ID Numbers: See Table: Storage Tanks

Emissions Control Equipment Descriptions: See Table: Storage Tanks

Table: Storage Tanks

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment & ID	Raw Material & Size (gal)	Construction Permits
EP F61	EU T61	Denatured Ethanol Storage Tank	T61 Internal Floating Roof	Denatured Ethanol 1,500,000	05-A-014
EP F62	EU T62	Denatured Ethanol Storage Tank	T62 Internal Floating Roof	Denatured Ethanol 1,500,000	05-A-015
EP F63	EU T63	200 Proof Ethanol Storage Tank	T63 Internal Floating Roof	200 Proof Ethanol 200,000	05-A-016
EP F64	EU T64	Denaturant Storage Tank	T64 Internal Floating Roof	Denaturant 200,000	05-A-017
EP F65	EU T65	190 Proof Ethanol Storage Tank	T65 Internal Floating Roof	190 Proof Ethanol 200,000	05-A-018

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

There are no emission limits at this time.

NSPS

This equipment is subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (40 CFR 60 Subpart Kb; 567 IAC 23.1(2)''ddd'' and the General Provisions (40 CFR Part 60 Subpart A; 567 IAC 23.1(2)).

Authority for Requirement: Iowa DNR Construction Permits listed in Table: Storage Tanks
40 CFR 60 Subpart Kb
567 IAC 23.1(2)“ddd”

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP FP

Associated Equipment

Associated Emissions Unit ID Numbers: EU FP

Emission Unit vented through this Emission Point: EU FP

Emission Unit Description: Fire Water Pump

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 300 Bhp

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 05-A-022-S2

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.75 lb/hr⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-022-S2

Pollutant: PM-10

Emission Limit(s): 0.75 lb/hr⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-022-S2

Pollutant: Sulfur Dioxide (SO₂)

Emission Limits: 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Iowa DNR Construction Permit 05-A-022-S2

Pollutant: Nitrogen Oxides (NO_x)

Emission Limits: 10.65 lb/hr⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-022-S2

⁽³⁾ The emission limit is expressed as the average of three (3) runs.

NESHAP:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(ii) this compression ignition emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Authority for Requirements: 40 CFR 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of operation:

- A. This emission unit shall not operate more than 100 hours per rolling twelve (12) month period.

Process throughput:

- A. This emission unit shall operate on diesel fuel only.
- B. The sulfur content shall not exceed 0.5% (by wt)

Work practice standards:

- A. The owner/operator shall change oil and filter on this unit every 500 hours of operation or annually, whichever comes first.
- B. The owner/operator shall inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
- C. The owner/operator shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- D. The owner/operator shall install a non-resettable hour meter.
- E. The owner/operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
- F. a) This engine is limited to operate as an emergency stationary RICE as defined in §63.6675 and in accordance with §63.6640(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established under Hours of Operation, above, is not exceeded. In accordance with §63.6640(f), the engine is limited to operate a maximum of 100 hours per year for maintenance checks and readiness testing.
b) The engine is also allowed to operate up to 50 hours per year in non-emergency situations, but the 50 hours are counted toward the 100 hours for maintenance and testing. The 50 hours per year for non-emergency operation cannot be used to generate income for the facility to supply power to the electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. This engine is not allowed to operate as a peak shaving unit.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The fuel used and its sulfur content.
- B. The owner or operator shall maintain the following monthly records:
 - a) the number of hours that the engine operated for maintenance checks and readiness testing;
 - b) the number of hours that the engine operated for allowed non-emergency operations;
 - c) the total number of hours that the engine operated; and
 - d) the rolling 12-month total amount of the number of hours that the engine operated.
- C. The owner/operator shall maintain the following annual records:
 - a) the number of hours that the engine operated for maintenance checks and readiness testing; and
 - b) the number of hours that the engine operated for allowed non-emergency operations.

Authority for Requirement: Iowa DNR Construction Permit 05-A-022-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 10

Stack Opening, (inches, dia.): 5

Exhaust Flow Rate (scfm): 600

Exhaust Temperature (°F): 855

Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-022-S2

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department within 30 days of the discovery and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP F110

Associated Equipment

Associated Emissions Unit ID Numbers: EU F110

Emission Unit vented through this Emission Point: EU F110
Emission Unit Description: VOC Emissions from Equipment Leaks
Raw Material/Fuel: Ethanol
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 11.43 tons/yr⁽¹⁾
Authority for Requirement: Iowa DNR Construction Permit 05-A-019-S1

⁽¹⁾ The emission limit is a twelve (12) month rolling total.

NSPS and NESHAP:

The equipment leaks at this facility are subject to the requirements of the New Source Performance Standard (NSPS) for Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 (40 CFR 60 Subpart VV, 567 IAC 23.1(2)"nn").

Authority for Requirement: Iowa DNR Construction Permit 05-A-019-S1
40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"

This facility is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing (40 CFR 63 Subpart FFFF; 567 IAC 23.1(4)"cf". The requirements that specifically apply to the equipment leaks are found in 40 CFR 63.2480.

Authority for Requirement: Iowa DNR Construction Permit 05-A-019-S1
40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

- A. The owner/operator shall comply with all requirements of the New Source Performance Standard (NSPS) 40 CFR 63 Subpart VV.
- B. The owner/operator shall comply with all requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Miscellaneous Organic Chemical Manufacturing 40 CFR 63 Subpart FFFF and all referenced subparts as applicable.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. From each months leak detection tracking information determine the following for each component type;
 - a) The fraction of sources that were repaired the previous month that were found to be leaking this month.
 - b) The fraction of sources that were successfully repaired after being found to be leaking in the previous months monitoring.
 - c) The fraction of sources that were found to not be leaking during the previous months monitoring that were found to be leaking during this month's monitoring.
- B. Using the information collected in 1, above, determine the control efficiency of the leak detection and repair program as outlined in EPA's document 453/R-95-017 titled Protocol for Equipment Leak Emission Estimates (page 5-54 through 5-57). Control efficiencies listed in table 5-2 (pages 5-9) may be assumed for those components listed. If these control efficiencies are assumed, the information required by A. above need not be recorded for that component type.
- C. Using the information collected above, determine the VOC emissions over the previous month from the facility using the calculation methods outlined in EPA's document 453/R-95-017 titled Protocol for Equipment Leak Emission Estimates (page 2-11).
- D. At the end of each month, record the total VOC emissions over the previous month from the facility by adding the emissions totals for each section as determined in C. above.
- E. At the end of each month, record the total VOC emissions over the previous 12 (twelve) months as determined in D. above.
- F. The owner/operator shall maintain all records required by the New Source Performance Standard and outlined in 40 CFR 60 Subpart VV.
- G. The owner/operator shall maintain all records required by the National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart FFFF and all applicable referenced subparts.

Authority for Requirement: Iowa DNR Construction Permit 05-A-019-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP F120

Associated Equipment

Associated Emissions Unit ID Number: EU F120
Emissions Control Measure Description: Sweeping/Flushing

Emission Unit vented through this Emission Point: EU F120
Emission Unit Description: Truck Traffic
Raw Material/Fuel: Truck Traffic
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): No Visible Emissions⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"c"

Iowa DNR Construction Permit 05-A-021-S3

⁽¹⁾ The permit holder shall take all reasonable precautions to prevent visible emissions from crossing the property line of this facility.

Pollutant: Particulate Matter (PM)

Emission Limit(s): 5.57 tons/yr⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-021-S3

Pollutant: PM-10

Emission Limit(s): 1.13 tons/yr⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-021-S3

Pollutant: PM-2.5

Emission Limit(s): 0.28 tons/yr⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 05-A-021-S3

⁽²⁾ The emission limit is a twelve (12) month rolling total.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

- A. The haul road shall be paved prior to the receipt of any grain.
- B. Truck traffic on the haul road shall not exceed 10 mph. The speed limit shall be posted on the haul road.
- C. Any spills on the road shall be cleaned up immediately.

Control equipment parameters:

- A. Truck traffic emissions on the paved road shall be controlled by water flushing (except as noted in d), below) and sweeping (see A., under Reporting and Recordkeeping below) once per day. The water rate shall be a minimum of 0.23 gallons per square yard.
 - a) If water flushing followed by sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) only sweeping is required. Water flushing and/or sweeping is not required for days of inclement weather.
 - b) Water flushing and sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hr time period or the paved road(s) will not be used on a given day.
 - c) Water flushing and sweeping need not occur if the plant does not receive any truck traffic that day (i.e. on a weekend).
 - d) Daily water flushing need not occur provided that the haul road emissions do not exceed 3.93 tons PM for the last twelve months. This shall be calculated using the formula in Section D under Reporting and Recordkeeping below of this permit. Provided emissions as calculated in Section D under Reporting and Recordkeeping below remain below 3.93 tons for the last twelve months, only daily sweeping is required. In the event that emissions exceed 3.9 tons for the last twelve months the plant shall be required to commence daily water flushing with daily sweeping until PM emissions fall below 3.93 tons for the last twelve months.
- B. Silt load performance testing shall be completed monthly, maintaining the schedule previously started under previous versions of this permit. Testing shall be completed prior to water flushing and/or sweeping for that day. Provided the results demonstrate compliance with the PM & PM₁₀ ton per year emission limits listed under the Emission Limits section, above, reduced frequency of testing may be requested after 12 performance tests have been completed (see Section D under Reporting and Recordkeeping below).
- C. The owner/operator shall record the number of trucks that load/unload material on a monthly basis. Based on the number of trucks, the total Vehicle Miles Traveled (VMT) shall be calculated for that month.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. Record the frequency of sweeping performed on the haul roads. If the roads are not swept due to weather, a written record must be kept on site outlining the conditions.
- B. Performance testing on haul road surface silt loading shall be completed on a monthly basis. For each performance test, silt loading sampling shall be done for at least 3 different locations. Performance testing shall be completed prior to water flushing and/or sweeping.
- C. The plant shall maintain a log for the haul roads that shows the following:
 - a) The silt content of the road for that month based on testing;
 - b) The date of performance testing;
 - c) The vehicle miles traveled (VMT) for that month;
 - d) Each day record whether or not water flushing and sweeping was accomplished. For days w/o water flushing and/or sweeping record the circumstances (i.e. weather condition, equipment malfunction);
 - e) The amount of water applied and the areas treated;
 - f) The operator's initials.
- D. The owner or operator shall calculate and record the monthly haul road emissions according to the following formulas, which uses the equations from AP-42 Section 13.2.1, the empirical constants.

$$E_{PM} = \frac{[0.32 * (sL)^{0.971}] * VMT}{2000}$$

Where E = tons PM per month
 sL = road surface silt loading (g/m²) for each performance test
 VMT = Vehicle miles traveled

$$E_{PM10} = \frac{[0.065 * (sL)^{0.971}] * VMT}{2000}$$

Where E = tons PM10 per month
 sL = road surface silt loading (g/m²) for each performance test
 VMT = Vehicle miles traveled

$$E_{PM2.5} = \frac{[0.016 * (sL)^{0.971}] * VMT}{2000}$$

Where E = tons PM2.5 per month
 sL = road surface silt loading (g/m²) for each performance test
 VMT = Vehicle miles traveled

Authority for Requirement: Iowa DNR Construction Permit 05-A-021-S3

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP F130

Associated Equipment

Associated Emissions Unit ID Number: EU F130

Emission Unit vented through this Emission Point: EU F130
Emission Unit Description: WDGS Storage & Loadout
Raw Material/Fuel: WDGS
Rated Capacity: 258,720 tons/yr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

Iowa DNR Construction Permit 07-A-272-S1

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/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 DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The emission limit is a six (6) minute average.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

A. Total wet cake production shall not exceed 258,720 tons per twelve month rolling period.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. At the end of each month, record the amount of WDGS produced over the previous month.
- B. At the end of each month, record the amount of WDGS produced over the previous twelve (12) months.

Authority for Requirement: Iowa DNR Construction Permit 07-A-272-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S150

Associated Equipment

Associated Emission Unit ID Numbers: EU S150

Emission Unit vented through this Emission Point: EU S150

Emission Unit Description: Whole Stillage Tank

Raw Material/Fuel: Whole Stillage

Rated Capacity: 180,000 gal.

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾⁽²⁾

Authority for Requirement: 567 IAC 23.3(2)"d"

⁽¹⁾ 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⁾ The emission limit is a six (6) minute average.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 3.23 lb/hr⁽³⁾

Authority for Requirement: Iowa DNR Construction Permit 13-A-557

⁽³⁾ The emission limit is expressed as the average of three (3) runs.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 57.7

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 167

Exhaust Temperature (°F): 167

Discharge Style: Downward

Authority for Requirement: Iowa DNR Construction Permit 13-A-557

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department within 30 days of the discovery and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP F150

Associated Equipment

Associated Emission Unit ID Numbers: EU F150

Emission Unit vented through this Emission Point: EU F150

Emission Unit Description: Open Transportation Devices

Raw Material/Fuel: Ethanol Unloading Fugitives

Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 3.74 tons/yr⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 14-A-460

⁽¹⁾ The emission limit is a twelve (12) month rolling total.

Operational Limits & Requirements

Operating limits for the Open Transportation Devices (EU F150) at the facility shall be:

- A. The permittee shall develop and follow a best management practice (BMP) guidance document to minimize emission from Open Transportation Devices (EU 150) at the facility. The BMP shall, at a minimum, outline the action steps necessary to minimize the amount of time that the railcar or truck is left open for loading or unloading of product or material to or from the tank.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

- A. The permittee shall maintain and make available a copy of the BMP guidance document.

Authority for Requirement: Iowa DNR Construction Permit 14-A-460

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): See Note
- Stack Opening, (inches, dia.): See Note
- Exhaust Flow Rate (scfm): See Note
- Exhaust Temperature (°F): See Note
- Discharge Style: See Note

Note: Emissions from this unit are fugitive emissions from open transportation devices, i.e. railcars or tanker trucks. These emissions occur when the railcar or truck tank is opened for unloading of product or material to or from the tank. This permit only accounts for the time between opening the tank and connection of vapor collection system to the tank for loading purposes

Authority for Requirement: Iowa DNR Construction Permit 14-A-460

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department within 30 days of the discovery and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

- Agency Approved Operation & Maintenance Plan Required?** Yes No
- Facility Maintained Operation & Maintenance Plan Required?** Yes No
- Compliance Assurance Monitoring (CAM) Plan Required?** Yes No

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 22.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Windsor Heights, Iowa 50324, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permits, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness.

All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 22.107 (4)

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms

from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.

6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.

7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and

- f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.
 - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
 - b. Compliance test methods specified in 567 Chapter 25; or
 - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be

followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. **Written Reporting of Excess Emissions.** A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. **Emergency Defense for Excess Emissions.** For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
 - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
 - e. The changes comply with all applicable requirements.
 - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that does any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
 - i. Do not violate any applicable requirement;
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

- v. Are not modifications under any provision of Title I of the Act; and
- vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
 - ii. The permittee's suggested draft permit;
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
 - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.111-567 IAC 22.113*

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (567 IAC 23.1(3)"a"); training fires and controlled burning of a demolished building (567 IAC 23.2).

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 *except* 23.2(3)"j"; 567 IAC 23.2(3)"j" - *State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a"*, *567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source

receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit;
or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 22.111(1). *567 IAC 22.111 (1)"d"*

G29. Disclaimer

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. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test 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 applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating 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 the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source 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 such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 725-9545

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
U.S. EPA Region 7
Air Permits and Compliance Branch
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 725-9500

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2

2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

7900 Hickman Road, Suite #200
Windsor Heights, IA 50324
(515) 725-0268

Field Office 6

1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health

Air Quality Branch
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

Appendix A: 40 CFR Part 60, Subpart A

Web Link to New Source Performance Standards: General Conditions

www.gpo.gov/fdsys/

See Featured Collections

- **Code of Federal Regulations**
- **Choose year**
- **Title 40**
- **Part 60**

Appendix B: 40 CFR Part 60, Subpart Db

Web Link to New Source Performance Standards (NSPS) for Industrial-Commercial-Institutional Steam Generating Units.

www.gpo.gov/fdsys/

See Featured Collections

- **Code of Federal Regulations**
- **Choose year**
- **Title 40**
- **Part 60**

Appendix C: 40 CFR Part 63, Subpart ZZZZ

Web Link to the National Emissions Standards for Hazardous Air Pollutants: Stationary Reciprocating Internal Combustion Engines

www.gpo.gov/fdsys/

See Featured Collections

- **Code of Federal Regulations**
- **Choose year**
- **Title 40**
- **Part 63**

Appendix D: 40 CFR Part 60, Subpart Kb

Web Link to New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (including petroleum liquids).

www.gpo.gov/fdsys/

See Featured Collections

- **Code of Federal Regulations**
- **Choose year**
- **Title 40**
- **Part 60**

Appendix E: 40 CFR Part 60, Subpart VV

Web Link to New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

www.gpo.gov/fdsys/

See Featured Collections

- **Code of Federal Regulations**
- **Choose year**
- **Title 40**
- **Part 60**

Appendix E: 40 CFR Part 63, Subpart FFFF

**Web Link to the National Emissions Standards for Hazardous Air Pollutants:
Miscellaneous Organic Chemical Manufacturing.**

www.gpo.gov/fdsys/

See Featured Collections

- **Code of Federal Regulations**
- **Choose year**
- **Title 40**
- **Part 63**