

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

**Name of Permitted Facility: Vantage Corn Processors, LLC**

**Facility Location: 1425 60<sup>th</sup> Avenue SW  
Cedar Rapids, IA 52404**

**Air Quality Operating Permit Number: 08-TV-007R1-M001**

**Expiration Date: January 5, 2022**

**Permit Renewal Application Deadline: July 5, 2021**

**EIQ Number: 92-9080**

**Facility File Number: 57-01-246**

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**Responsible Official**

**Name: Chris Cuddy**

**Title: President**

**Mailing Address: 4666 Faries Parkway, Decatur, Illinois 62526**

**Phone #: 217-451-8250**

**Permit Contact Person for the Facility**

**Name: Rich Stephens**

**Title: Environmental Coordinator**

**Mailing Address: 1350 Waconia Ave. SW, Cedar Rapids, Iowa 52404**

**Phone #: 319-398-0735**

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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. This facility and ADM Corn Processing (Plant No. 57-01-080), Bio Springer North America Corporation (Plant No. 57-01-226), LeSaffre Blending Plant (Plant No. 57-01-226), and Red Star Yeast Company, LLC (Plant No. 57-01-226). Four Title V permits have been issued for the five facilities. This permit is for Vantage Corn Processors. Other permits have been issued for ADM Corn Processing (Permit No. 08-TV-004R1-M001), Bio Springer (Permit No. 12-TV-005R1), and LeSaffre and Red Star (Permit No. 10-TV-006R1).

**For the Director of the Department of Natural Resources**

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Lori Hanson, Supervisor of Air Operating Permits Section

Date

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## Abbreviations

|                  |  |
|------------------|--|
| acfm             | actual cubic feet per minute                       |
| AQD              | Air Quality Division (Linn County)                 |
| APCO             | Air Pollution Control Officer                      |
| CDA              | completely denatured alcohol                       |
| <i>CFBC</i>      | Circulating Fluidized Bed Combustion               |
| CFR              | Code of Federal Regulation                         |
| CE               | control equipment                                  |
| CEM              | continuous emission monitor                        |
| D.C.             | dust collector                                     |
| °F               | degrees Fahrenheit                                 |
| EIQ              | emissions inventory questionnaire                  |
| EP               | emission point                                     |
| EU               | emission unit                                      |
| gr./dscf         | grains per dry standard cubic foot                 |
| gr./100 cf       | grains per one hundred cubic feet                  |
| IAC              | Iowa Administrative Code                           |
| IDNR             | Iowa Department of Natural Resources               |
| LCPH             | Linn County Public Health                          |
| LCO              | Linn County Ordinance                              |
| MR               | mechanical recompression                           |
| MVAC             | motor vehicle air conditioner                      |
| NAICS            | North American Industry Classification System      |
| NSPS             | New Source Performance Standard                    |
| ppmv             | parts per million by volume                        |
| PSD              | Prevention of Significant Deterioration            |
| lb./hr           | pounds per hour                                    |
| lb./MMBtu        | pounds per million British thermal units           |
| RTO              | Regenerative Thermal Oxidizer                      |
| SCC              | Source Classification Codes                        |
| scfm             | standard cubic feet per minute                     |
| SEP              | Supplemental Environmental Project                 |
| SIC              | Standard Industrial Classification                 |
| SNCR             | selective non-catalytic reduction                  |
| TPY              | tons per year                                      |
| USEPA            | United States Environmental Protection Agency      |
| Pollutants       |  |
| PM               | particulate matter                                 |
| PM <sub>10</sub> | particulate matter ten microns or less in diameter |
| SO <sub>2</sub>  | sulfur dioxide                                     |
| NO <sub>x</sub>  | nitrogen oxides                                    |
| VOC              | volatile organic compound                          |
| CO               | carbon monoxide                                    |
| HAP              | hazardous air pollutant                            |

# I. Facility Description and Equipment List

Facility Name: ADM Corn Processing

Permit Number: 08-TV-007R1-M001

Facility Description: Corn Wet Milling Plant (SIC 2046)

## Equipment List

| Emission Point Number | Emission Unit Number | Emission Unit Description            | LCPH Permit Numbers |
|-----------------------|----------------------|--------------------------------------|---------------------|
| <b>DRY MILL</b>       |                      |                                      |                     |
| SEP-400               | EU-400A              | #3 Truck Scale                       | 6564 / 6563         |
| SEP-400               | EU-400C              | Truck Dump Receiving Drag #3         | 6564 / 6563         |
| SEP-400               | EU-400E              | #2 Rail Dump                         | 6564 / 6563         |
| SEP-400               | EU-400F              | #2 Rail Dump Transfer Drag           | 6564 / 6563         |
| SEP-400               | EU-400G              | #2 Rail Receiving Drag               | 6564 / 6563         |
| SEP-400               | EU-400H              | #3 Bucket Leg                        | 6564 / 6563         |
| SEP-400               | EU-400I              | #2 Reclaim Conveyor                  | 6564 / 6563         |
| SEP-400               | EU-400J              | #3 Headhouse Top Loading Conveyor    | 6564 / 6563         |
| SEP-400               | EU-400L              | #2 Silo Storage Bin                  | 6564 / 6563         |
| SEP-400               | EU-400M              | #4 Silo Storage Bin                  | 6564 / 6563         |
| SEP-400               | EU-400P              | Bulk Weigh Scale Belt                | 6564 / 6563         |
| SEP-400               | EU-401B              | #2 Truck Scale                       | 6564 / 6563         |
| SEP-400               | EU-401D              | Truck Dump Receiving Drag #2         | 6564 / 6563         |
| SEP-400               | EU-401H              | #5 Bucket Leg                        | 6564 / 6563         |
| SEP-400               | EU-401I              | Rail Transfer Conveyor               | 6564 / 6563         |
| SEP-400               | EU-401K              | #2 Bucket Leg                        | 6564 / 6563         |
| SEP-400               | EU-401P              | Surge Bin                            | 6564 / 6563         |
| SEP-400               | EU-401Q              | Bulk Weigh Scale Belt                | 6564 / 6563         |
| SEP-400               | EU-401W              | #1 Fines Storage Bin                 | 6564 / 6563         |
| SEP-400               | EU-401X              | Cracked Corn & Fines Conveyor        | 6564 / 6563         |
| SEP-400               | EU-401Y              | Cracked Corn & Fines Weigh Belt      | 6564 / 6563         |
| SEP-400               | EU-401Z              | Cracked Corn & Fines Bucket Elevator | 6564 / 6563         |
| SEP-401               | EU-401A              | #1 Truck Scale                       | 6565 / 6564         |
| SEP-401               | EU-401B              | #2 Truck Scale                       | 6565 / 6564         |
| SEP-401               | EU-401C              | Truck Dump Receiving Drag #1         | 6565 / 6564         |
| SEP-401               | EU-401D              | Truck Dump Receiving Drag #2         | 6565 / 6564         |
| SEP-401               | EU-401E              | #1 Rail Dump                         | 6565 / 6564         |
| SEP-401               | EU-401F              | #1 Rail Dump Transfer Drag           | 6565 / 6564         |
| SEP-401               | EU-401G              | #1 Rail Receiving Drag               | 6565 / 6564         |
| SEP-401               | EU-401H              | #5 Bucket Leg                        | 6565 / 6564         |

| <b>Emission Point Number</b> | <b>Emission Unit Number</b> | <b>Emission Unit Description</b>      | <b>LCPH Permit Numbers</b> |
|------------------------------|-----------------------------|---------------------------------------|----------------------------|
| SEP-401                      | EU-401I                     | Rail Transfer Conveyor                | 6565 / 6564                |
| SEP-401                      | EU-401J                     | #1 Bucket Leg                         | 6565 / 6564                |
| SEP-401                      | EU-401K                     | #2 Bucket Leg                         | 6565 / 6564                |
| SEP-401                      | EU-401L                     | #4 Bucket Leg                         | 6565 / 6564                |
| SEP-401                      | EU-401M                     | #1 Reclaim Conveyor                   | 6565 / 6564                |
| SEP-401                      | EU-401N                     | #2 Headhouse Top Loading Conveyor     | 6565 / 6564                |
| SEP-401                      | EU-401O                     | #1 Headhouse Top Loading Conveyor     | 6565 / 6564                |
| SEP-401                      | EU-401P                     | Surge Bin                             | 6565 / 6564                |
| SEP-401                      | EU-401Q                     | Bulk Weigh Scale Belt                 | 6565 / 6564                |
| SEP-401                      | EU-401S                     | #1 Silo Storage Bin                   | 6565 / 6564                |
| SEP-401                      | EU-401T                     | #3 Silo Storage Bin                   | 6565 / 6564                |
| SEP-401                      | EU-401U                     | #5 Silo Storage Bin                   | 6565 / 6564                |
| SEP-401                      | EU-401W                     | #1 Fines Storage Bin                  | 6565 / 6564                |
| SEP-401                      | EU-401X                     | Cracked Corn & Fines Conveyor         | 6565 / 6564                |
| SEP-401                      | EU-401Y                     | Cracked Corn & Fines Weigh Belt       | 6565 / 6564                |
| SEP-401                      | EU-401Z                     | Cracked Corn & Fines Bucket Elevator  | 6565 / 6564                |
| SEP-401                      | EU-400P                     | Bulk Weigh Scale Belt                 | 6565 / 6564                |
| SEP-403                      | EU-403A                     | Hammermill #1                         | 6458 / 6313                |
| SEP-403                      | EU-403B                     | Hammermill #2                         | 6458 / 6313                |
| SEP-403                      | EU-403C                     | Hammermill #3                         | 6458 / 6313                |
| SEP-403                      | EU-403D                     | Hammermill #4                         | 6458 / 6313                |
| SEP-403                      | EU-403F                     | Hammermill #5                         | 6458 / 6313                |
| SEP-403                      | EU-403G                     | Hammermill #6                         | 6458 / 6313                |
| SEP-403                      | EU-403H                     | Hammermill #7                         | 6458 / 6313                |
| SEP-403                      | EU-403I                     | Elevator to Mill Corn Belt Conveyor A | 6458 / 6313                |
| SEP-403                      | EU-403J                     | Elevator to Mill Corn Belt Conveyor B | 6458 / 6313                |
| SEP-403                      | EU-403M                     | Rotex Scalper A                       | 6458 / 6313                |
| SEP-403                      | EU-403N                     | Rotex Scalper B                       | 6458 / 6313                |
| SEP-403                      | EU-403O                     | Mill Storage Hopper A                 | 6458 / 6313                |
| SEP-403                      | EU-403P                     | Mill Storage Hopper B                 | 6458 / 6313                |
| SEP-403                      | EU-403Q                     | Mill Flour Drag A                     | 6458 / 6313                |
| SEP-403                      | EU-403R                     | Mill Flour Drag B                     | 6458 / 6313                |
| SEP-403                      | EU-403S                     | Mill Blender A                        | 6458 / 6313                |
| SEP-403                      | EU-403T                     | Mill Blender B                        | 6458 / 6313                |
| SEP-410                      | EU-410                      | Equalization Tank                     | 5709 / 6271                |
| SEP-411                      | EU-411                      | WWTP Aeration Tank                    | 5195 / 6272                |
| SEP-412                      | EU-412A                     | WWTP Anaerobic Digester               | 5196 / 6310                |
| SEP-412                      | EU-412B                     | WWTP Anaerobic Digester               | 5196 / 6310                |
| SEP-412                      | EU-412C                     | WWTP Anaerobic Digester               | 5196 / 6310                |
| SEP-413                      | EU-413                      | Membrane Filtration Tank #1           | 5764 / 6273                |
| SEP-414                      | EU-414                      | Membrane Filtration Tank #2           | 5765 / 6274                |
| SEP-415                      | EU-415                      | Membrane Filtration Tank #3           | 5766 / 6275                |
| SEP-416                      | EU-416                      | Membrane Filtration Tank #4           | 5767 / 6276                |

| <b>Emission Point Number</b> | <b>Emission Unit Number</b> | <b>Emission Unit Description</b> | <b>LCPH Permit Numbers</b> |
|------------------------------|-----------------------------|----------------------------------|----------------------------|
| SEP-420                      | EU-420N                     | Dry Slurry Mix Tank #1           | 5197 / 6270                |
| SEP-420                      | EU-420O                     | Dry Slurry Mix Tank #2           | 5197 / 6270                |
| SEP-420                      | EU-420P                     | Pre-Cook Tank #1                 | 5197 / 6270                |
| SEP-420                      | EU-420Q                     | Pre-Cook Tank #2                 | 5197 / 6270                |
| SEP-420                      | EU-420R                     | Barometric Condenser #1          | 5197 / 6270                |
| SEP-420                      | EU-420S                     | Barometric Condenser #2          | 5197 / 6270                |
| SEP-420                      | EU-420T                     | Liquifaction Tank #1             | 5197 / 6270                |
| SEP-420                      | EU-420U                     | Liquifaction Tank #2             | 5197 / 6270                |
| SEP-420                      | EU-420V                     | Liquifaction Tank #3             | 5197 / 6270                |
| SEP-420                      | EU-420W                     | Liquifaction Tank #4             | 5197 / 6270                |
| SEP-420                      | EU-420Z                     | Liquifaction Tank #7             | 5197 / 6270                |
| SEP-420                      | EU-420AA                    | Liquifaction Tank #8             | 5197 / 6270                |
| SEP-420                      | EU-420BB                    | Liquifaction Tank #9             | 5197 / 6270                |
| SEP-420                      | EU-420CC                    | Liquifaction Tank #10            | 5197 / 6270                |
| SEP-420                      | EU-420DD                    | Distillation and Dehydration     | 5197 / 6270                |
| SEP-420                      | EU-420EE                    | Nitrogen Stripper                | 5197 / 6270                |
| SEP-420                      | EU-420FF                    | Stillage Evaporation #1          | 5197 / 6270                |
| SEP-420                      | EU-420GG                    | Stillage Evaporation #2          | 5197 / 6270                |
| SEP-420                      | EU-420HH                    | Stillage Evaporation #3          | 5197 / 6270                |
| SEP-420                      | EU-420II                    | Stillage Evaporation #4          | 5197 / 6270                |
| SEP-420                      | EU-420JJ                    | Decanter Feed Tank               | 5197 / 6270                |
| SEP-420                      | EU-420KK                    | Centrate Tank                    | 5197 / 6270                |
| SEP-420                      | EU-420LL                    | Condensed Distillers Tank        | 5197 / 6270                |
| SEP-420                      | EU-420MM                    | Evaporator Feed Tank #1          | 5197 / 6270                |
| SEP-420                      | EU-420NN                    | Evaporator Feed Tank #2          | 5197 / 6270                |
| SEP-420                      | EU-420OO                    | Evaporator Product Tank          | 5197 / 6270                |
| SEP-420                      | EU-420PP                    | Evaporator Condensate Tank       | 5197 / 6270                |
| SEP-420                      | EU-420RR                    | Process Water Tank               | 5197 / 6270                |
| SEP-420                      | EU-420SS                    | Wastewater Transfer Tank         | 5197 / 6270                |
| SEP-420                      | EU-420TT                    | Yeast Propagator #1              | 5197 / 6270                |
| SEP-420                      | EU-420UU                    | Yeast Propagator #2              | 5197 / 6270                |
| SEP-420                      | EU-420VV                    | Yeast Propagator #3              | 5197 / 6270                |

| <b>Emission Point Number</b> | <b>Emission Unit Number</b> | <b>Emission Unit Description</b> | <b>LCPH Permit Numbers</b> |
|------------------------------|-----------------------------|----------------------------------|----------------------------|
| SEP-420                      | EU-420XX                    | Fermenter #1                     | 5197 / 6270                |
| SEP-420                      | EU-420YY                    | Fermenter #2                     | 5197 / 6270                |
| SEP-420                      | EU-420ZZ                    | Fermenter #3                     | 5197 / 6270                |
| SEP-420                      | EU-420AAA                   | Fermenter #4                     | 5197 / 6270                |
| SEP-420                      | EU-420BBB                   | Fermenter #5                     | 5197 / 6270                |
| SEP-420                      | EU-420CCC                   | Fermenter #6                     | 5197 / 6270                |
| SEP-420                      | EU-420DDD                   | Fermenter #7                     | 5197 / 6270                |
| SEP-420                      | EU-420EEE                   | Fermenter #8                     | 5197 / 6270                |
| SEP-420                      | EU-420FFF                   | Fermenter #9                     | 5197 / 6270                |
| SEP-420                      | EU-420GGG                   | Fermenter #10                    | 5197 / 6270                |
| SEP-420                      | EU-420HHH                   | Fermenter #11                    | 5197 / 6270                |
| SEP-420                      | EU-420III                   | Fermenter #12                    | 5197 / 6270                |
| SEP-420                      | EU-420JJJ                   | Fermenter #13                    | 5197 / 6270                |
| SEP-420                      | EU-420KKK                   | Fermenter #14                    | 5197 / 6270                |
| SEP-420                      | EU-420LLL                   | Fermenter #15                    | 5197 / 6270                |
| SEP-420                      | EU-420MMM                   | Fermenter #16                    | 5197 / 6270                |
| SEP-420                      | EU-420TTT                   | Fermenter #23                    | 5197 / 6270                |
| SEP-420                      | EU-420UUU                   | Fermenter #24                    | 5197 / 6270                |
| SEP-420                      | EU-420VVV                   | Beerwell #1                      | 5197 / 6270                |
| SEP-420                      | EU-420WWW                   | Beerwell #2                      | 5197 / 6270                |
| SEP-422                      | EU-422                      | DDGS Cooler #1                   | 6785 / 0                   |
| SEP-423                      | EU-423                      | DDGS Cooler #2                   | 6786 / 0                   |
| SEP-425                      | EU-425                      | Indirect-Fired DDGS Dryer #1     | 5202 / 6277                |
| SEP-426                      | EU-426                      | Indirect-Fired DDGS Dryer #2     | 5203 / 6279                |
| SEP-427                      | EU-427                      | Indirect-Fired DDGS Dryer #3     | 5204 / 6281                |
| SEP-428                      | EU-428                      | Indirect-Fired DDGS Dryer #4     | 5205 / 6282                |



| <b>Emission Point Number</b> | <b>Emission Unit Number</b> | <b>Emission Unit Description</b>           | <b>LCPH Permit Numbers</b> |
|------------------------------|-----------------------------|--|----------------------------|
| SEP-429                      | EU-429                      | Indirect-Fired DDGS Dryer #5               | 5206 / 6284                |
| SEP-440                      | EU-440                      | Alcohol Process Day Tank #1                | 5217 / 6285                |
| SEP-441                      | EU-441                      | Alcohol Process Day Tank #2                | 5218 / 6286                |
| SEP-442                      | EU-442                      | Alcohol Process Quality Control Tank       | 5219 / 6287                |
| SEP-443                      | EU-443                      | Alcohol Process Reclaim Tank               | 5220 / 6288                |
| SEP-444                      | EU-444                      | Alcohol Storage Tank #1                    | 6615 / 6525                |
| SEP-445                      | EU-445                      | Alcohol Storage Tank #2                    | 6616 / 6526                |
| SEP-447                      | EU-447                      | Denaturant Storage Tank                    | 6617 / 6527                |
| SEP-448                      | EU-448                      | Corrosion Inhibitor Storage Tank           | 5226 / 6289                |
| SEP-449                      | EU-449                      | 190° Alcohol Process Tank                  | 5227 / 6290                |
| SEP-450                      | EU-450A                     | Ethanol Loadout Spout #1                   | 5228 / 6308                |
| SEP-450                      | EU-450B                     | Ethanol Loadout Spout #2                   | 5228 / 6308                |
| SEP-450                      | EU-450C                     | Ethanol Loadout Spout #3                   | 5228 / 6308                |
| SEP-450                      | EU-450D                     | Ethanol Loadout Spout #4                   | 5228 / 6308                |
| SEP-450                      | EU-450E                     | Ethanol Loadout Spout #5                   | 5228 / 6308                |
| SEP-450                      | EU-450F                     | Ethanol Loadout Spout #6                   | 5228 / 6308                |
| SEP-450                      | EU-450G                     | Ethanol Loadout Spout #7                   | 5228 / 6308                |
| SEP-450                      | EU-450H                     | Ethanol Loadout Spout #8                   | 5228 / 6308                |
| SEP-451                      | EU-450A                     | Ethanol Loadout Spout #1                   | 5229 / 6309                |
| SEP-451                      | EU-450B                     | Ethanol Loadout Spout #2                   | 5229 / 6309                |
| SEP-451                      | EU-450C                     | Ethanol Loadout Spout #3                   | 5229 / 6309                |
| SEP-451                      | EU-450D                     | Ethanol Loadout Spout #4                   | 5229 / 6309                |
| SEP-451                      | EU-450E                     | Ethanol Loadout Spout #5                   | 5229 / 6309                |
| SEP-451                      | EU-450F                     | Ethanol Loadout Spout #6                   | 5229 / 6309                |
| SEP-451                      | EU-450G                     | Ethanol Loadout Spout #7                   | 5229 / 6309                |
| SEP-451                      | EU-450H                     | Ethanol Loadout Spout #8                   | 5229 / 6309                |
| SEP-452                      | EU-452                      | Fire Pump Engine #1                        | 5230 / 6291                |
| SEP-453                      | EU-453                      | Fire Pump Engine #2                        | 5236 / 6292                |
| SEP-454                      | EU-454                      | Fire Pump Engine #3                        | 5237 / 6293                |
| SEP-455                      | EU-455                      | Fire Pump Engine #4                        | 5231 / 6294                |
| SEP-457                      | EU-457                      | Emergency Generator #2                     | 5233 / 6295                |
| SEP-478                      | EU-478                      | Feed Storage and Reclaim Building          | 6734 / 6601                |
| SEP-478                      | EU-478A                     | DDGS Rail Loading Shuttle Drag Conveyor    | 6734 / 6601                |
| SEP-479                      | EU-479                      | Sulfuric Acid Storage Tank                 | 5241 / 6296                |
| SEP-480                      | EU-480                      | Flat Feed Storage and Reclaim Building     | 5242 / 0                   |
| SEP-481                      | EU-481G                     | DDGS Feed Elevator #2                      | 6736 / 6609                |
| SEP-481                      | EU-481H                     | DDGS Flat Storage Reclaim L Path Conveyor  | 6736 / 6609                |
| SEP-481                      | EU-481I                     | DDGS Bulkweigher Feed Elevator #2          | 6736 / 6609                |
| SEP-481                      | EU-481J                     | DDGS Truck Loading Shuttling Drag Conveyor | 6736 / 6609                |
| SEP-482                      | EU-482                      | Dry Feed Storage Silo #1                   | 5244 / 6297                |
| SEP-485                      | EU-485                      | 30% Condensed Distillers Solubles Loadout  | 5247 / 6298                |
| SEP-486                      | EU-486A                     | Cooling Tower Cell #1                      | 5248 / 6299                |
| SEP-486                      | EU-486B                     | Cooling Tower Cell #2                      | 5248 / 6299                |

| <b>Emission Point Number</b> | <b>Emission Unit Number</b> | <b>Emission Unit Description</b>            | <b>LCPH Permit Numbers</b> |
|------------------------------|-----------------------------|---|----------------------------|
| SEP-486                      | EU-486C                     | Cooling Tower Cell #3                       | 5248 / 6299                |
| SEP-486                      | EU-486D                     | Cooling Tower Cell #4                       | 5248 / 6299                |
| SEP-486                      | EU-486E                     | Cooling Tower Cell #5                       | 5248 / 6299                |
| SEP-486                      | EU-486F                     | Cooling Tower Cell #6                       | 5248 / 6299                |
| SEP-486                      | EU-486G                     | Cooling Tower Cell #7                       | 5248 / 6299                |
| SEP-486                      | EU-486H                     | Cooling Tower Cell #8                       | 5248 / 6299                |
| SEP-486                      | EU-486I                     | Cooling Tower Cell #9                       | 5248 / 6299                |
| SEP-486                      | EU-486J                     | Cooling Tower Cell #10                      | 5248 / 6299                |
| SEP-495                      | EU-495                      | Dry Grind Unleaded Fuel Tank                | 5768 / 6300                |
| SEP-496                      | EU-496                      | Dry Grind Diesel Fuel Tank                  | 5769 / 6301                |
| SEP-497                      | EU-497A                     | Cooled DDGS Belt Conveyor #1                | 6735 / 6610                |
| SEP-497                      | EU-497B                     | DDGS Incline Drag Conveyor #1               | 6735 / 6610                |
| SEP-497                      | EU-497C                     | DDGS Flat Storage Piling Drag Conveyor      | 6735 / 6610                |
| SEP-497                      | EU-497D                     | DDGS Silo #1 Recirculation Drag Conveyor    | 6735 / 6610                |
| SEP-497                      | EU-497E                     | DDGS Silo #1 Laidig Conveyor                | 6735 / 6610                |
| SEP-497                      | EU-497I                     | DDGS Bulkweigher Feed Elevator              | 6735 / 6610                |
| SEP-497                      | EU-497J                     | DDGS Silo Feed Elevator                     | 6735 / 6610                |
| SEP-497                      | EU-497K                     | DDGS Bulkweigh Scale #1                     | 6735 / 6610                |
| SEP-497                      | EU-497L                     | DDGS Bulkweigh Scale #2                     | 6735 / 6610                |
| SEP-497                      | EU-497M                     | DDGS Bulkweigher Discharge Drag Conveyor #1 | 6735 / 6610                |
| SEP-497                      | EU-497N                     | DDGS Bulkweigher Discharge Drag Conveyor #2 | 6735 / 6610                |
| SEP-497                      | EU-497O                     | DDGS Silo #1 Laidig Conveyor                | 6735 / 6610                |
| SEP-497                      | EU-497P                     | DDGS Silo #1 Reclaim Drag Conveyor          | 6735 / 6610                |
| SEP-498                      | EU-498                      | Dry Mill Haul Roads                         | 6623 / 6528                |
| SEP-499                      | EU-499                      | Dry Mill VOC Emissions from Equipment Leaks | 5251 / 6303                |
|                              |                             |   |                            |

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**Insignificant Activities Equipment List**

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| <b>Insignificant Emission Unit Number</b> | <b>Insignificant Emission Unit Description</b> |
|---|--|
|   |  |
| <b>DRY MILL</b>                           |  |
|   |  |

| <b>Insignificant Emission Unit Number</b> | <b>Insignificant Emission Unit Description</b> |
|---|--|
|   |  |
| MISCELLANEOUS                             |  |
| DMS                                       | DM CT Sulfuric Acid Tank                       |

## II. Plant-Wide Conditions

Facility Name: Vantage Corn Processors, LLC  
Permit Number: 08-TV-007R1-M001

Permit conditions are established in accordance with 567 Iowa Administrative Code rule 22.108.

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### Permit Duration

The term of this permit is: less than 5 years  
Commencing on: January 6, 2017  
Ending on: January 5, 2022

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.

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### 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): 20% opacity  
Authority for Requirement: LCO 10.7

Sulfur Dioxide (SO<sub>2</sub>): 500 parts per million by volume  
Authority for Requirement: 567 IAC 23.3(3)"e"  
LCO 10.12(2)

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### 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"

### Particulate Matter:

No person shall permit, cause, suffer or allow the emission of particulate matter into the atmosphere in any one hour from any emission point from any process equipment at a rate in

excess of that specified in Table I for the process weight rate allocated to such emission point. The emission standards in LCO 10.9 (1)"a" shall apply and those specified in LCO 10.8 and 10.9 and Table I shall not apply to each process of the types listed in those sections, with the following exception: whenever the compliance status, history of operations, ambient air quality in the vicinity, or the type of control equipment utilized, would warrant maximum control, the Air Pollution Control Officer may enforce 0.1 grain per standard cubic foot of exhaust gas, or Table I of this section, whichever would result in the lowest allowable emission rate.

Authority for Requirement: LCO 10.9(1)

Fugitive Dust:

Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits 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 roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (The preceding sentence is State only.) 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 public 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 be 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, fertilizer 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"

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### **Regulatory Authority**

This facility is located in Linn County, Iowa. Linn County Public Health, under agreement with the Iowa Department of Natural Resources (IDNR), is the primary regulatory agency in Linn County. This Title V permit is issued by the Iowa Department of Natural Resources, however, required contacts and information submittals referred to in this permit as required by "the Department" should continue to be directed to the Linn County Public Health office. This will include such items as stack test notification, stack test results submittal, oral and written excess emission reports, and reports and records required in the Linn County construction permits. Information specifically required by the Title V permit such as the annual EIQ and fees, annual compliance certification, semi-annual monitoring report and any Title V forms submitted for updates, modifications, renewals, etc. must be submitted to the Iowa DNR. Stack test notifications and test results for tests required as periodic monitoring in the Title V permit shall be submitted to Linn County Public Health. Stack test protocols and test results conducted as required by a PSD permit shall be submitted to the IDNR and Linn County Public Health Air Quality Division.

Authority for Requirement: 567 IAC 22.108

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### **40 CFR 63 NESHAP Subpart FFFF, Miscellaneous Organic Chemical Manufacturing**

The requirements of the NESHAP in 40 CFR 63, Subpart FFFF apply to the miscellaneous organic chemical manufacturing process units at this source (including but not limited to process vents, storage tanks, transfer stations, pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems used in the ethanol manufacturing process). Specific emission units subject to this requirement will be determined by the compliance date. The requirements include, but are not limited to the following:

The emission limits, work practice standards, and compliance requirements pursuant to 40 CFR §63.2450-63.2490.

The notification, reporting, and recordkeeping requirements pursuant to 40 CFR §63.2515-63.2525.

The proposed compliance date for the existing chemical manufacturing process units at this source are May 10, 2008. The facility must comply with all requirements of this subpart by the compliance date as determined in the final rule.

Authority for Requirement: LCO 10.9(4) "ffff"  
567 IAC 23.1(4)"cf"  
40 CFR 63 Subpart FFFF

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**Compliance Plan**

*The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.*

Unless otherwise noted in Section III of this permit, ADM Corn Processing is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, ADM Corn Processing shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

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### III. Emission Point-Specific Conditions

Facility Name: Vantage Corn Processors, LLC

Permit Number: 08-TV-007R1-M001

**Emission Point ID Number: SEP-400, SEP-401**

**Process Area: DRY MILL**

**Table Dry Mill 1. Associated Equipment.**

| EP                 | EU      | EU Description                       | Raw Material/<br>Fuel | Rated Capacity     | CE               | CE Description       |
|--------------------|---------|--------------------------------------|-----------------------|--------------------|------------------|----------------------|
| SEP-400            | EU-400A | #3 Truck Scale                       | Corn                  | 20,000<br>bu/hr    | CE-400           | Baghouse             |
| SEP-400            | EU-400C | Truck Dump<br>Receiving Drag #3      | Corn                  | 30,000<br>bu/hr    | CE-400           | Baghouse             |
| SEP-400            | EU-400E | #2 Rail Dump                         | Corn                  | 30,000<br>bu/hr    | CE-400           | Baghouse             |
| SEP-400            | EU-400F | #2 Rail Dump<br>Transfer Drag        | Corn                  | 30,000<br>bu/hr    | CE-400           | Baghouse             |
| SEP-400            | EU-400G | #2 Rail Receiving<br>Drag            | Corn                  | 30,000<br>bu/hr    | CE-400           | Baghouse             |
| SEP-400            | EU-400H | #3 Bucket Leg                        | Corn                  | 30,000<br>bu/hr    | CE-400           | Baghouse             |
| SEP-400            | EU-400I | #2 Reclaim<br>Conveyor               | Corn                  | 30,000<br>bu/hr    | CE-400           | Baghouse             |
| SEP-400            | EU-400J | #3 Headhouse Top<br>Loading Conveyor | Corn                  | 30,000<br>bu/hr    | CE-400           | Baghouse             |
| SEP-400            | EU-400L | #2 Silo Storage Bin                  | Corn                  | 486,000<br>bushels | CE-400           | Baghouse             |
| SEP-400            | EU-400M | #4 Silo Storage Bin                  | Corn                  | 486,000<br>bushels | CE-400           | Baghouse             |
| SEP-400<br>SEP-401 | EU-400P | Bulk Weigh Scale<br>Belt             | Corn                  | 30,000<br>bu/hr    | CE-400<br>CE-401 | Baghouse<br>Baghouse |
| SEP-401            | EU-401A | #1 Truck Scale                       | Corn                  | 20,000<br>bu/hr    | CE-401           | Baghouse             |
| SEP-400<br>SEP-401 | EU-401B | #2 Truck Scale                       | Corn                  | 20,000<br>bu/hr    | CE-400<br>CE-401 | Baghouse<br>Baghouse |
| SEP-401            | EU-401C | Truck Dump<br>Receiving Drag #1      | Corn                  | 30,000<br>bu/hr    | CE-401           | Baghouse             |
| SEP-400<br>SEP-401 | EU-401D | Truck Dump<br>Receiving Drag #2      | Corn                  | 30,000<br>bu/hr    | CE-400<br>CE-401 | Baghouse<br>Baghouse |
| SEP-401            | EU-401E | #1 Rail Dump                         | Corn                  | 30,000<br>bu/hr    | CE-401           | Baghouse             |
| SEP-401            | EU-401F | #1 Rail Dump<br>Transfer Drag        | Corn                  | 30,000<br>bu/hr    | CE-401           | Baghouse             |
| SEP-401            | EU-401G | #1 Rail Receiving<br>Drag            | Corn                  | 30,000<br>bu/hr    | CE-401           | Baghouse             |



| <b>EP</b>          | <b>EU</b> | <b>EU Description</b>                | <b>Raw Material/<br/>Fuel</b> | <b>Rated Capacity</b> | <b>CE</b>        | <b>CE Description</b> |
|--------------------|-----------|--------------------------------------|-------------------------------|-----------------------|------------------|-----------------------|
| SEP-400<br>SEP-401 | EU-401H   | #5 Bucket Leg                        | Corn                          | 30,000<br>bu/hr       | CE-400<br>CE-401 | Baghouse<br>Baghouse  |
| SEP-400<br>SEP-401 | EU-401I   | Rail Transfer<br>Conveyor            | Corn                          | 30,000<br>bu/hr       | CE-400<br>CE-401 | Baghouse<br>Baghouse  |
| SEP-401            | EU-401J   | #1 Bucket Leg                        | Corn                          | 486,000<br>bushels    | CE-401           | Baghouse              |
| SEP-400<br>SEP-401 | EU-401K   | #2 Bucket Leg                        | Corn                          | 30,000<br>bu/hr       | CE-400<br>CE-401 | Baghouse              |
| SEP-401            | EU-401L   | #4 Bucket Leg                        | Corn                          | 30,000<br>bu/hr       | CE-401           | Baghouse              |
| SEP-401            | EU-401M   | #1 Reclaim<br>Conveyor               | Corn                          | 30,000<br>bu/hr       | CE-401           | Baghouse              |
| SEP-401            | EU-401N   | #2 Headhouse Top<br>Loading Conveyor | Corn                          | 30,000<br>bu/hr       | CE-401           | Baghouse              |
| SEP-401            | EU-401O   | #1 Headhouse Top<br>Loading Conveyor | Corn                          | 30,000<br>bu/hr       | CE-401           | Baghouse              |
| SEP-400<br>SEP-401 | EU-401P   | Surge Bin                            | Corn                          | 10,000<br>bu/hr       | CE-400<br>CE-401 | Baghouse<br>Baghouse  |
| SEP-400<br>SEP-401 | EU-401Q   | Bulk Weigh Scale<br>Belt             | Corn                          | 30,000<br>bu/hr       | CE-400<br>CE-401 | Baghouse<br>Baghouse  |
| SEP-401            | EU-401S   | #1 Silo Storage Bin                  | Corn                          | 486,000<br>bushels    | CE-401           | Baghouse              |
| SEP-401            | EU-401T   | #3 Silo Storage Bin                  | Corn                          | 486,000<br>bushels    | CE-401           | Baghouse              |
| SEP-401            | EU-401U   | #5 Silo Storage Bin                  | Corn                          | 486,000<br>bushels    | CE-401           | Baghouse              |
| SEP-400<br>SEP-401 | EU-401W   | #1 Fines Storage<br>Bin              | Corn                          | 45,000<br>bu/hr       | CE-400<br>CE-401 | Baghouse<br>Baghouse  |
| SEP-400<br>SEP-401 | EU-401X   | Cracked Corn &<br>Fines Conveyor     | Corn                          | 15,000<br>bu/hr       | CE-400<br>CE-401 | Baghouse<br>Baghouse  |
| SEP-400<br>SEP-401 | EU-401Y   | Cracked Corn &<br>Fines Weigh Belt   | Corn                          | 15,000<br>bu/hr       | CE-400<br>CE-401 | Baghouse<br>Baghouse  |
| SEP-400<br>SEP-401 | EU-401Z   | Cracked Corn &<br>Fines Elevator     | Corn                          | 15,000<br>bu/hr       | CE-400<br>CE-401 | Baghouse<br>Baghouse  |

### **Applicable Requirements**

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

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

**Table Dry Mill 2. Opacity Emission Limits.**

| EP                 | EU               | Opacity  | Authority for Requirement                                  |
|--------------------|------------------|--|--|
| SEP-400<br>SEP-401 | EU-400<br>EU-401 | 0% <sup>1,2</sup>                                | DNR PSD Permit #07-A-533-P1<br>DNR PSD Permit #07-A-534-P1 |
| SEP-400<br>SEP-401 | EU-400<br>EU-401 | 0% when handling grain <sup>3</sup>              | 40 CFR §60.302(c)(2) Subpart DD                            |
| SEP-400<br>SEP-401 | EU-400<br>EU-401 | 5% when unloading truck and/or rail <sup>3</sup> | 40 CFR §60.302(c)(1) Subpart DD                            |

**Table Dry Mill 3. Particulate Matter Emission Limits.**

| EP                 | EU               | Pollutant          | Emission Limit(s)                                     | Authority for Requirement                                  |
|--------------------|------------------|--------------------|---|--|
| SEP-400<br>SEP-401 | EU-400<br>EU-401 | Particulate Matter | 0.004 gr/dscf <sup>4</sup><br>2.09 lb/hr <sup>4</sup> | DNR PSD Permit #07-A-533-P1<br>DNR PSD Permit #07-A-534-P1 |
|                    |                  |                    | 0.01 gr/dscf <sup>4</sup>                             | 40 CFR §60.302(b)(1) Subpart DD                            |
|                    |                  |                    | PM <sub>10</sub>                                      | 0.004 gr/dscf <sup>4</sup><br>2.09 lb/hr <sup>4</sup>      |
|                    |                  | PM <sub>2.5</sub>  | 0.004 gr/dscf <sup>4</sup>                            | DNR PSD Permit #07-A-533-P1<br>DNR PSD Permit #07-A-534-P1 |

**Table Dry Mill 4. General Emission Limits.**

| EP                 | EU               | Pollutant | Emission Limit(s) | Authority for Requirement               |
|--------------------|------------------|-----------|-------------------|---|
| SEP-400<br>SEP-401 | EU-400<br>EU-401 | Opacity   | 40%               | 567 IAC 23.3(2)"d"                      |
|                    |                  |           | 20%               | LCO 10.7                                |
|                    |                  | PM        | 0.1 gr/dscf       | 567 IAC 23.3(2)"a"(2)<br>LCO 10.9(1)"a" |

<sup>1</sup> The emission limit is a six (6) minute average.

<sup>2</sup> An exceedance of the indicator opacity of this emission point 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).

<sup>3</sup> Standard is expressed as a six-minute average and applies at all times, except during periods of startup, shutdown, and malfunction.

<sup>4</sup> 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 Device:**

A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: DNR PSD Permit #07-A-533-P1  
DNR PSD Permit #07-A-534-P1

**NSPS and NESHAP Applicability:**

These emission units are subject to Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS) and Subpart DD - Standards of Performance for Grain Elevators (40 CFR §60.300 through 40 CFR §60.304) and is also subject to the requirements of 567 IAC 23.1(2)"ooo".

Authority for Requirement: DNR PSD Permit #07-A-533-P1  
DNR PSD Permit #07-A-534-P1

**Operating Limits:**

- A. All grain unloading activities, including both truck and rail unloading, shall be conducted within an enclosure. During truck unloading, the enclosure shall be closed via means of a door on both the entrance and exit of the unloading bay and a wall that extends at least 5 feet above the height of both doors that separates one bay from another. During rail unloading, the enclosure shall be enclosed via a physical barrier which totally covers any opening. If plastic strips are used to cover the rail enclosure openings, the plastic strips shall be replaced periodically when they become warped or damaged and are no longer providing an effective enclosure.
- B. All grain unloading from hopper bottom trucks and railcars shall use a "choke flow" method to minimize fugitive dust emissions.
- C. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- D. The differential pressure measured across the control equipment (CE-400, CE-401) shall be maintained between 0.5 inches of water column and 6 inches of water column, with the exception of unit startup.

Authority for Requirement: DNR PSD Permit #07-A-533-P1  
DNR PSD Permit #07-A-534-P1

**Operating Condition Monitoring and 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall properly operate and maintain equipment to continuously monitor the baghouse pressure drop. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, or per written facility-specific operation and maintenance plan.
- B. The owner or operator shall collect and record the differential pressure, in inches of H<sub>2</sub>O, on a continuous basis. The requirement shall not apply on the days of the baghouse or the equipment that the baghouse controls is not in operation.
- C. The owner or operator shall maintain a record of the range of baghouse pressure drop observed during the last successful compliance test for reference.
- D. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to

promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.

- E. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment and monitoring devices.

Authority for Requirement: DNR PSD Permit #07-A-533-P1  
DNR PSD Permit #07-A-534-P1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**Table Dry Mill 5.**

| EP      | LCPH<br>ATI / PTO<br>Numbers | Stack Characteristics                   |                           |                                       |                          |                                   |
|---------|------------------------------|---|---------------------------|---------------------------------------|--------------------------|-----------------------------------|
|         |                              | Stack Height<br>(feet, above<br>ground) | Discharge<br>Style        | Stack<br>Opening<br>(inches,<br>dia.) | Exhaust<br>Temp.<br>(°F) | Exhaust<br>Flow<br>Rate<br>(scfm) |
| SEP-400 | 6564 / 6563                  | 150                                     | Vertical,<br>unobstructed | 54                                    | Ambient                  | 61,000                            |
| SEP-401 | 6565 / 6564                  | 150                                     | Vertical,<br>unobstructed | 54                                    | Ambient                  | 61,000                            |

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake

opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No <sup>1</sup>

<sup>1</sup> CAM has been waived. DNR PSD Permits #07-A-533-P1 and #07-A-534-P1 have CAM equivalent monitoring and recordkeeping required.

Authority for Requirement: 567 IAC 22.108(3)

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**Emission Point ID Number: SEP-403****Process Area: DRY MILL****Table Dry Mill 6. Associated Equipment.**

| <b>EP</b> | <b>EU</b> | <b>EU Description</b>                       | <b>Raw Material/<br/>Fuel</b> | <b>Rated Capacity</b> | <b>CE</b> | <b>CE Description</b> |
|-----------|-----------|---|-------------------------------|-----------------------|-----------|-----------------------|
| SEP-403   | EU-403A   | Hammermill #1                               | Corn                          | 2,500<br>bu/hr        | CE-403A   | Baghouse              |
| SEP-403   | EU-403B   | Hammermill #2                               | Corn                          | 2,500<br>bu/hr        | CE-403A   | Baghouse              |
| SEP-403   | EU-403C   | Hammermill #3                               | Corn                          | 2,500<br>bu/hr        | CE-403A   | Baghouse              |
| SEP-403   | EU-403D   | Hammermill #4                               | Corn                          | 2,500<br>bu/hr        | CE-403A   | Baghouse              |
| SEP-403   | EU-403F   | Hammermill #5                               | Corn                          | 2,500<br>bu/hr        | CE-403B   | Baghouse              |
| SEP-403   | EU-403G   | Hammermill #6                               | Corn                          | 2,500<br>bu/hr        | CE-403B   | Baghouse              |
| SEP-403   | EU-403H   | Hammermill #7                               | Corn                          | 2,500<br>bu/hr        | CE-403B   | Baghouse              |
| SEP-403   | EU-403I   | Elevator to Mill<br>Corn Belt<br>Conveyor A | Corn                          | 20,000<br>bu/hr       | CE-403C   | Baghouse              |
| SEP-403   | EU-403J   | Elevator to Mill<br>Corn Belt<br>Conveyor B | Corn                          | 20,000<br>bu/hr       | CE-403C   | Baghouse              |
| SEP-403   | EU-403M   | Rotex Scalper A                             | Corn                          | 20,000<br>bu/hr       | CE-403C   | Baghouse              |
| SEP-403   | EU-403N   | Rotex Scalper B                             | Corn                          | 20,000<br>bu/hr       | CE-403C   | Baghouse              |
| SEP-403   | EU-403O   | Mill Storage<br>Hopper A                    | Corn                          | 2,860<br>bu/hr        | CE-403C   | Baghouse              |
| SEP-403   | EU-403P   | Mill Storage<br>Hopper B                    | Corn                          | 2,860<br>bu/hr        | CE-403C   | Baghouse              |
| SEP-403   | EU-403Q   | Mill Flour Drag A                           | Corn                          | 20,000<br>bu/hr       | CE-403C   | Baghouse              |
| SEP-403   | EU-403R   | Mill Flour Drag B                           | Corn                          | 20,000<br>bu/hr       | CE-403C   | Baghouse              |
| SEP-403   | EU-403S   | Mill Blender A                              | Corn                          | 20,000<br>bu/hr       | CE-403C   | Baghouse              |
| SEP-403   | EU-403T   | Mill Blender B                              | Corn                          | 20,000<br>bu/hr       | CE-403C   | Baghouse              |

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## 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.*

**Table Dry Mill 7. Emission Limits.**

| EP      | EU     | Pollutant          | Emission Limit(s)                                     | Authority for Requirement   |
|---------|--------|--------------------|---|-----------------------------|
| SEP-403 | EU-403 | Opacity            | 0% <sup>1,2</sup>                                     | DNR PSD Permit #07-A-535-P2 |
|         |        | Particulate Matter | 0.004 gr/dscf <sup>3</sup>                            | DNR PSD Permit #07-A-535-P2 |
|         |        | PM <sub>10</sub>   | 0.004 gr/dscf <sup>3</sup><br>3.78 lb/hr <sup>3</sup> | DNR PSD Permit #07-A-535-P2 |
|         |        | PM <sub>2.5</sub>  | 0.004 gr/dscf <sup>3</sup>                            | DNR PSD Permit #07-A-535-P2 |

**Table Dry Mill 8. General Emission Limits.**

| EP      | EU     | Pollutant | Emission Limit(s)  | Authority for Requirement               |
|---------|--------|-----------|--------------------|---|
| SEP-403 | EU-403 | Opacity   | 40% <sup>1</sup>   | 567 IAC 23.3(2)"d"                      |
|         |        |           | 20% <sup>1,2</sup> | LCO 10.7                                |
|         |        | PM        | 0.1 gr/dscf        | 567 IAC 23.3(2)"a"(2)<br>LCO 10.9(1)"a" |

<sup>1</sup> The emission limit is a six (6) minute average.

<sup>2</sup> An exceedance of the indicator opacity of this emission unit 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 corrections, the Department may require additional proof to demonstrate compliance (e.g. stack testing).

<sup>3</sup> 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 Device:**

A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: LCPH ATI 6458 / PTO 6313

#### **Operating Requirements with Associated Monitoring and 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly conduct an EPA Method 9 evaluation to determine compliance with the opacity limit.

- B. The pressure drop across the baghouses (CE-403A, CE-403B, and CE-403C) shall be maintained between 0.3 and 5.0 inches of water column. The owner or operator shall monitor and record the pressure drop across the baghouses (CE-403A, CE-403B, and CE-403C) on a weekly basis.
- C. Each baghouse shall be maintained according to the manufacturer's specifications and/or good operating practices. The owner or operator shall record the date and description of all maintenance performed on the control devices.
- D. The BAE for PM<sub>2.5</sub> for this project are 1.4 tpy. Per 567 IAC 33.3(18)"f"(1), prior to beginning actual construction of the project (Project Number 15-370), the owner or operator shall document and maintain a record of the following information:
  - i. A description of the project (Project Number 15-370);
  - ii. Identification of the emission unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (Project Number 15-370); and
  - iii. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions (BAE), the projected actual emissions (PAE), the amount of emissions excluded under paragraph "3" of the definition of "*projected actual emissions*" in 567 IAC 33.3(1), an explanation describing why such amount was excluded, and any netting calculations, if applicable.
- E. Per 567 IAC 33.3(18)"f"(4), the owner or operator shall:
  - i. Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in Condition [D.ii above];
  - ii. Calculate the annual emissions, in tons per year on a calendar-year basis, for a period of ten (10) years following resumption of regular operations and maintain a record of regular operations after the change.
- F. Per 567 IAC 33.3(18)"f"(5), the owner or operator shall retain a written record containing information required in Condition E [above] for a period of ten (10) years after the project (Project 15-370) is completed.
- G. Per 567 IAC 33.3(18)"g", the owner or operator shall make the information required to be documented and maintained pursuant to 567 IAC 33.3(18)"f" available for review upon request for inspection by the Department or the general public pursuant to the requirements for Title V operating permits contained in 567 IAC 22.107(6).
- H. The owner or operator shall determine the actual emissions for the project and record the value of the actual emissions minus the BAE from the project on a monthly basis.
- I. Actual emissions minus the BAE from the project shall not exceed the PSD significant levels. If these limits are exceeded during the ten (10) year review period, the owner or operator shall submit a report pursuant to 567 IAC 33.3(18)"f"(7).
- J. The facility is allowed to exclude those emissions following this change that could have been accommodated during the consecutive 24-month period used to establish BAE and are unrelated to this project (i.e., increased utilization due to demand growth). The



facility shall be required to include a justification for any emissions excluded due to demand growth.

Authority for Requirement: DNR PSD Permit #07-A-534-P2

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 130

Discharge Style: Vertical, Unobstructed

Stack Opening, (diameter, inches): 72

Exhaust Temperature (°F): Ambient

Exhaust Flow Rate (scfm): 110,000

Authority for Requirement: DNR PSD Permit #07-A-535-P2

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes <sup>1</sup> No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes <sup>2</sup> No

<sup>1</sup> Facility maintained operation & maintenance plan is required for PM<sub>10</sub>.

<sup>2</sup> Compliance Assurance Monitoring plan is required for PM.

*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)

Refer to Appendix B, CAM Plans, for the complete Compliance Assurance Monitoring plans.

**Emission Point ID Number: SEP-410, SEP-411, SEP-413, SEP-414, SEP-415, SEP-416**

**Process Area: DRY MILL**

**Table Dry Mill 9. Associated Equipment.**

| EP      | EU     | EU Description              | Raw Material/<br>Fuel | Rated<br>Capacity    | CE   |
|---------|--------|-----------------------------|-----------------------|----------------------|------|
| SEP-410 | EU-410 | Equalization Tank           | Wastewater            | 3,000 gpm            | None |
| SEP-411 | EU-411 | WWTP Aeration Tank          | Wastewater            | 1,500,000<br>gallons | None |
| SEP-413 | EU-413 | Membrane Filtration Tank #1 | Wastewater            | 36,000<br>gallons    | None |
| SEP-414 | EU-414 | Membrane Filtration Tank #2 | Wastewater            | 36,000<br>gallons    | None |
| SEP-415 | EU-415 | Membrane Filtration Tank #3 | Wastewater            | 36,000<br>gallons    | None |
| SEP-416 | EU-416 | Membrane Filtration Tank #4 | Wastewater            | 36,000<br>gallons    | None |

**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.*

**Table Dry Mill 10. Emission Limits.**

| EP      | EU     | VOC                  | H <sub>2</sub> S                 | Authority for Requirement     |
|---------|--------|----------------------|----------------------------------|-------------------------------|
| SEP-410 | EU-410 | 20 ppm <sub>vd</sub> | 5 ppm <sub>vd</sub> <sup>1</sup> | DNR PSD Permit #09-A-382-P    |
| SEP-411 | EU-411 |                      |                                  | DNR PSD Permit #07-A-539-P-S1 |
| SEP-413 | EU-413 |                      |                                  | DNR PSD Permit #09-A-383-P    |
| SEP-414 | EU-414 |                      |                                  | DNR PSD Permit #09-A-384-P    |
| SEP-415 | EU-415 |                      |                                  | DNR PSD Permit #09-A-385-P    |
| SEP-416 | EU-416 |                      |                                  | DNR PSD Permit #09-A-386-P    |

<sup>1</sup> Limit requested by the facility to keep the project (06-298) minor for PSD for Hydrogen Sulfide, Total Reduced Sulfur, and Reduced Sulfur Compounds. The averaging time is based on the methodology used for sampling in 'Operating Condition Monitoring.'

**Operational Limits & Requirements**

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

**NSPS and NESHAP Applicability:**

This emission unit is subject to Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF - Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". Not all of the general provisions in Subpart A are applicable to sources subject to the requirements of Subpart

FFFF. See Table 12 to Subpart FFFF of 40 CFR §63 for a detailed listing of which general provisions are applicable.

This emission unit is not subject to any New Source Performance Standards (NSPS) at this time. There are no applicable Subparts.

Authority for Requirement: DNR PSD Permit #09-A-382-P  
DNR PSD Permit #07-A-539-P-S1  
DNR PSD Permit #09-A-383-P  
DNR PSD Permit #09-A-384-P  
DNR PSD Permit #09-A-385-P  
DNR PSD Permit #09-A-386-P

**Operating Limits:**

- A. This emission unit is subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2430 through 40 CFR §63.2550).
- B. The facility shall comply with all applicable requirements for each wastewater stream and liquid stream in open systems according to the provisions in 40 CFR §63.2485.

Authority for Requirement: DNR PSD Permit #09-A-382-P  
DNR PSD Permit #07-A-539-P-S1  
DNR PSD Permit #09-A-383-P  
DNR PSD Permit #09-A-384-P  
DNR PSD Permit #09-A-385-P  
DNR PSD Permit #09-A-386-P

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. Record monthly the total amount of wastewater processed through the aeration tank each month in gallons. Calculate VOC and Hydrogen Sulfide (H<sub>2</sub>S) emissions on a monthly basis and record the 12-month rolling total using EPA's WATER9 model, or the most recent update to this model.
- B. Record the VOC and H<sub>2</sub>S concentration determined using the EPA's WATER9 model, or the most recent update of this model.
- C. In order to determine the concentration of H<sub>2</sub>S and VOC for input into the model, ADM shall complete liquid sampling to establish a baseline value. Sampling for H<sub>2</sub>S and VOC concentrations in the wastewater shall be taken from the inlet to the WWTP Aeration Tank and shall either be completed continuously for 30 days or once a week for 6 months to establish a baseline. Sampling shall be conducted under representative process unit and treatment unit operating conditions, in accordance with 40 CFR §63.145(a)(3) and (4).

Wastewater samples shall be collected using sampling procedures which minimize the loss of organic compounds during the sample collection and analysis, and maintain sample integrity per 40 CFR §63.144(b)(5)(ii). The method shall be an analytical method which has that compound as a target analyte. Samples may be grab samples or composite

samples. Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of 3 runs.

- D. This emission unit is subject to all applicable recordkeeping, notification, and reporting requirements as set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2515, 40 CFR §63.2520, and 40 CFR §63.2525).

Authority for Requirement: DNR PSD Permit #09-A-382-P  
 DNR PSD Permit #07-A-539-P-S1  
 DNR PSD Permit #09-A-383-P  
 DNR PSD Permit #09-A-384-P  
 DNR PSD Permit #09-A-385-P  
 DNR PSD Permit #09-A-386-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**Table Dry Mill 11.**

| EP      | LCPH<br>ATI / PTO<br>Numbers | Stack Characteristics                      |                           |                                       |                          |                                   |
|---------|------------------------------|--|---------------------------|---------------------------------------|--------------------------|-----------------------------------|
|         |                              | Stack<br>Height<br>(feet, above<br>ground) | Discharge<br>Style        | Stack<br>Opening<br>(inches,<br>dia.) | Exhaust<br>Temp.<br>(°F) | Exhaust<br>Flow<br>Rate<br>(scfm) |
| SEP-410 | 5709 / 6271                  | 28   | Downward,<br>goose neck   | 18                                    | 95                       | Breathing<br>loss                 |
| SEP-411 | 5195 / 6272                  | 32   | Vertical,<br>unobstructed | 92                                    | 100                      | 5,000                             |
| SEP-413 | 5764 / 6273                  | 15   | Vertical,<br>unobstructed | 444 x 120                             | 90                       | 1,000                             |
| SEP-414 | 5765 / 6274                  | 15   | Vertical,<br>unobstructed | 444 x 120                             | 90                       | 1,000                             |
| SEP-415 | 5766 / 6275                  | 15   | Vertical,<br>unobstructed | 444 x 120                             | 90                       | 1,000                             |
| SEP-416 | 5767 / 6276                  | 15   | Vertical,<br>unobstructed | 444 x 120                             | 90                       | 1,000                             |

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**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)

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**Emission Point ID Number: SEP-412****Process Area: DRY MILL****Table Dry Mill 12. Associated Equipment.**

| EP      | EU      | EU Description                                   | Raw Material/<br>Fuel | Rated<br>Capacity | CE      |
|---------|---------|--|-----------------------|-------------------|---------|
| SEP-412 | EU-412A | Wastewater Treatment Plant<br>Anaerobic Digester | Biogas                | 65.55<br>MMBtu/hr | CE-412A |
| SEP-412 | EU-412B | Wastewater Treatment Plant<br>Anaerobic Digester |                       |                   | CE-412B |
| SEP-412 | EU-412C | Wastewater Treatment Plant<br>Anaerobic Digester |                       |                   | CE-412C |

**Table Dry Mill 13. Associated Control Equipment.**

| EP      | CE      | CE Description                            |
|---------|---------|---|
| SEP-412 | CE-412A | Ecotec H <sub>2</sub> S Biogas Scrubber   |
|         | CE-412B | Open Flare                                |
|         | CE-412C | Merichem H <sub>2</sub> S Biogas Scrubber |

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**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.***Table Dry Mill 14. Emission Limits.**

| EP      | EU     | Pollutant             | Emission<br>Limit(s)                                      | Authority for Requirement   |
|---------|--------|-----------------------|---|-----------------------------|
| SEP-412 | EU-412 | Opacity               | 0% <sup>1</sup>   | DNR PSD Permit #07-A-540-P2 |
|         |        | Particulate<br>Matter | 0.0075<br>lb/MMBtu <sup>2</sup>                           | DNR PSD Permit #07-A-540-P2 |
|         |        | PM <sub>10</sub>      | 0.0075<br>lb/MMBtu <sup>2</sup><br>0.49 lb/hr             | DNR PSD Permit #07-A-540-P2 |
|         |        | SO <sub>2</sub>       | 0.023 lb/MMBtu <sup>2</sup><br>1.50 lb/hr                 | DNR PSD Permit #07-A-540-P2 |
|         |        | NO <sub>x</sub>       | 0.10 lb/MMBtu <sup>2</sup><br>6.56 lb/hr                  | DNR PSD Permit #07-A-540-P2 |
|         |        | CO                    | 0.20 lb/MMBtu <sup>2</sup><br>13.13 lb/hr                 | DNR PSD Permit #07-A-540-P2 |
|         |        | VOC                   | 98% reduction <sup>3</sup><br>and 0.36 lb/hr <sup>4</sup> | DNR PSD Permit #07-A-540-P2 |
|         |        | H <sub>2</sub> S      | See Note <sup>5</sup>                                     | DNR PSD Permit #07-A-540-P2 |

**Table Dry Mill 15. General Emission Limits.**

| EP      | EU     | Pollutant       | Emission Limit(s)    | Authority for Requirement               |
|---------|--------|-----------------|----------------------|---|
| SEP-412 | EU-412 | Opacity         | 40%                  | 567 IAC 23.3(2)"d"                      |
|         |        |                 | 20%                  | LCO 10.7                                |
|         |        | PM              | 0.1 gr/dscf          | 567 IAC 23.3(2)"a"(2)<br>LCO 10.9(1)"a" |
|         |        | SO <sub>2</sub> | 500 ppm <sub>v</sub> | 567 IAC 23.3(3)"e"<br>LCO 10.12(2)      |

<sup>1</sup> Standard is expressed as a six-minute average.

<sup>2</sup> Standard is expressed as the average of 3 test runs.

<sup>3</sup> The percent reduction limit applies across the open flare, CE-412B.

<sup>4</sup> The pound per hour limit is the limit from the exhaust of the open flare, CE-412B.

<sup>5</sup> A limit of 200 ppm, 24-hour rolling average, has been established for the outlet of the Hydrogen Sulfide (H<sub>2</sub>S) Biogas Scrubbers, CE-412A or CE-412C. This limit does not correspond to the outlet of this emission point. Limit was requested by the facility as the basis of the SO<sub>2</sub> BACT for all of the equipment that is able to combust the biogas from the anaerobic digesters.

**Operational Limits & Requirements**

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

**Control Device:**

An Ecotec H<sub>2</sub>S Biogas Scrubber (CE-412A) or a Merichem H<sub>2</sub>S Biogas Scrubber (CE-412C) shall be used to control hydrogen sulfide emissions. An open flare (CE-412B) shall be used to control volatile organic compound emissions. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: LCPH ATI 5196 / PTO 6310

**NSPS and NESHAP Applicability:**

These emission units are subject to Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". Not all of the general provisions in Subpart A are applicable to sources subject to the requirements of Subpart FFFF. See Table 12 to Subpart FFFF of 40 CFR §63 for a detailed listing of which general provisions are applicable.

Authority for Requirement: DNR PSD Permit #07-A-540-P2

**Operating Limits:**

- A. The flare shall be designed and operated to meet the minimum requirements of 40 CFR §60.18(f).
- B. The anaerobic digester shall be controlled by the H<sub>2</sub>S biogas scrubber, CE-412A or the Merichem H<sub>2</sub>S Scrubber, CE-412C, and either the open flare, CE-412B, or by sending the biogas to the natural gas header to be used in the regenerative thermal oxidizer, CE-420B, the DDGS Dryer Combustion Chambers, CE-425, CE-426, CE-427, CE-428, CE-



429, CE-437, CE-438, and CE-439, or the Alcohol Loadout Flares, CE-450 and CE-451. The anaerobic digester shall at no time operate uncontrolled.

- C. This emission unit is subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2430 through 40 CFR §63.2550).
- D. This facility shall comply with all applicable requirements for each wastewater stream and liquid stream in open systems according to the provisions in 40 CFR §63.2485.
- E. The exhaust of the Ecotec H<sub>2</sub>S Biogas Scrubber, CE-412A, or the Merichem H<sub>2</sub>S Scrubber, CE-412C, shall contain less than 200 ppm H<sub>2</sub>S per 24-hour rolling average. The facility shall monitor H<sub>2</sub>S concentration from the outlet of the scrubber using a CEM (See ["Continuous Emission Monitoring"]).
- F. The owner or operator shall maintain the control equipment according to the manufacturer's specifications and maintenance schedule.

Authority for Requirement: DNR PSD Permit #07-A-540-P2

### **Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall properly operate and maintain equipment to monitor the pH for the biogas scrubber. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, or per written facility-specific operation and maintenance plan.
- B. The owner or operator shall collect and record the pH of the biogas scrubber, in standard units, continuously for the biogas scrubber. This requirement shall not apply on the days that the scrubber, or the equipment that the scrubber controls, is not in operation.
- C. This emission unit is subject to all applicable recordkeeping, notification, and reporting requirements, as set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2515, 40 CFR §63.2520, and 40 CFR §63.2525).
- D. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the monitoring device.

Authority for Requirement: DNR PSD Permit #07-A-540-P2

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 45

Discharge Style: Vertical, Unobstructed

Stack Opening, (diameter, inches): 8

Exhaust Temperature (°F): 1,500

Exhaust Flow Rate (scfm): 1,500

Authority for Requirement: DNR PSD Permit #07-A-540-P2

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

### **Monitoring Requirements**

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

#### **Stack Testing:**

Stack testing is not required at this time.

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity  $> 0\%$  is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

#### **Continuous Emission Monitoring:**

The owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring hydrogen sulfide emissions discharged from the Ecotec Biogas Scrubber, CE-412A, or the Merichem Biogas Scrubber, CE-412C. The output shall be reported as parts per million and calculated as a 24-hour rolling average.

The system shall be designed to meet the requirements of 40 CFR Part 60, Appendix B - Performance Specification 7 (PS7). The system shall be monitored according to the specifications of 40 CFR Part 60, Appendix F - Quality Assurance/Quality Control. The requirements in Appendix F shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

The CEMS shall be operated and data recorded during all periods of operation of the anaerobic digester except for CEMS breakdown and repairs. Data shall be recorded during calibration checks and zero and span adjustments.

Authority for Requirement: DNR PSD Permit #07-A-540-P2

**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: SEP-420****Process Area: DRY MILL****Table Dry Mill 16. Associated Equipment.**

| <b>EP</b> | <b>EU (420)<sup>1</sup></b> | <b>EU Description</b>      | <b>Raw Material /Fuel</b> | <b>Rated Capacity</b> | <b>CE</b>          | <b>CE Description</b>        | <b>Subject to NESHAP FFFF<sup>2</sup></b> |
|-----------|-----------------------------|----------------------------|---------------------------|-----------------------|--------------------|------------------------------|---|
| SEP-420   | N                           | Dry Slurry Mix Tank #1     | Distillate                | 15,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | O                           | Dry Slurry Mix Tank #2     | Distillate                | 15,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | P                           | Pre-Cook Tank #1           | Distillate                | 100,000 gallons       | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | Q                           | Pre-Cook Tank #2           | Distillate                | 100,000 gallons       | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | R                           | Barometric Condenser #1    | Distillate                | 8,000 gallons         | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | S                           | Barometric Condenser #2    | Distillate                | 8,000 gallons         | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | T                           | Liquifaction Tank #1       | Distillate                | 85,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | U                           | Liquifaction Tank #2       | Distillate                | 85,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | V                           | Liquifaction Tank #3       | Distillate                | 85,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | W                           | Liquifaction Tank #4       | Distillate                | 85,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | Z                           | Liquifaction Tank #7       | Distillate                | 85,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | AA                          | Liquifaction Tank #8       | Distillate                | 85,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | BB                          | Liquifaction Tank #9       | Distillate                | 85,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | CC                          | Liquifaction Tank #10      | Distillate                | 85,000 gallons        | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | DD                          | Distillation & Dehydration | Distillate                | 50,000 gal/hr         | CE-420B<br>CE-420C | RTO<br>Distillation Scrubber | Yes                                       |
| SEP-420   | EE                          | Nitrogen Stripper          | Distillate                | 50,000 gal/hr         | CE-420B<br>CE-420C | RTO<br>Distillation Scrubber | Yes                                       |
| SEP-420   | FF                          | Stillage Evaporation #1    | Distillate                | 114,000 gallons       | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | GG                          | Stillage Evaporation #2    | Distillate                | 114,000 gallons       | CE-420B            | RTO                          | Yes                                       |
| SEP-420   | HH                          | Stillage Evaporation #3    | Distillate                | 114,000 gallons       | CE-420B            | RTO                          | Yes                                       |

| <b>EP</b> | <b>EU (420)<sup>1</sup></b> | <b>EU Description</b>      | <b>Raw Material /Fuel</b> | <b>Rated Capacity</b> | <b>CE</b>          | <b>CE Description</b>           | <b>Subject to NESHAP FFFF<sup>2</sup></b> |
|-----------|-----------------------------|----------------------------|---------------------------|-----------------------|--------------------|---------------------------------|---|
| SEP-420   | II                          | Stillage Evaporation #4    | Distillate                | 114,000 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | JJ                          | Decanter Feed Tank         | Distillate                | 100,000 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | KK                          | Centrate Tank              | Distillate                | 100,000 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | LL                          | Condensed Distillers Tank  | Distillate                | 100,000 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | MM                          | Evaporator Feed Tank #1    | Distillate                | 400,000 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | NN                          | Evaporator Feed Tank #2    | Distillate                | 400,000 gallons       | CE-420B            | RTO                             | No  |
| SEP-420   | OO                          | Evaporator Product Tank    | Distillate                | 30,000 gallons        | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | PP                          | Evaporator Condensate Tank | Distillate                | 100,000 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | RR                          | Process Water Tank         | Distillate                | 50,000 gallons        | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | SS                          | Wastewater Transfer Tank   | Distillate                | 100,000 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | TT                          | Yeast Propagator #1        | Distillate                | 117,500 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | UU                          | Yeast Propagator #2        | Distillate                | 117,500 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | VV                          | Yeast Propagator #3        | Distillate                | 117,500 gallons       | CE-420B            | RTO                             | Yes                                       |
| SEP-420   | XX                          | Fermenter #1               | Distillate                | 850,000 gallons       | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                       |
| SEP-420   | YY                          | Fermenter #2               | Distillate                | 850,000 gallons       | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                       |
| SEP-420   | ZZ                          | Fermenter #3               | Distillate                | 850,000 gallons       | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                       |
| SEP-420   | AAA                         | Fermenter #4               | Distillate                | 850,000 gallons       | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                       |
| SEP-420   | BBB                         | Fermenter #5               | Distillate                | 850,000 gallons       | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                       |
| SEP-420   | CCC                         | Fermenter #6               | Distillate                | 850,000 gallons       | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                       |
| SEP-420   | DDD                         | Fermenter #7               | Distillate                | 850,000 gallons       | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                       |
| SEP-420   | EEE                         | Fermenter #8               | Distillate                | 850,000 gallons       | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                       |
| SEP-420   | FFF                         | Fermenter #9               | Distillate                | 850,000 gallons       | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                       |

| EP      | EU (420) <sup>1</sup> | EU Description | Raw Material /Fuel | Rated Capacity  | CE                 | CE Description                  | Subject to NESHAP FFFF <sup>2</sup> |
|---------|-----------------------|----------------|--------------------|-----------------|--------------------|---------------------------------|-------------------------------------|
| SEP-420 | GGG                   | Fermenter #10  | Distillate         | 850,000 gallons | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | HHH                   | Fermenter #11  | Distillate         | 850,000 gallons | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | III                   | Fermenter #12  | Distillate         | 850,000 gallons | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | JJJ                   | Fermenter #13  | Distillate         | 850,000 gallons | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | KKK                   | Fermenter #14  | Distillate         | 850,000 gallons | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | LLL                   | Fermenter #15  | Distillate         | 850,000 gallons | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | MMM                   | Fermenter #16  | Distillate         | 850,000 gallons | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | TTT                   | Fermenter #23  | Distillate         | 850,000 gallons | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | UUU                   | Fermenter #24  | Distillate         | 850,000 gallons | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | VVV                   | Beerwell #1    | Distillate         | 420,000 gal/hr  | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |
| SEP-420 | WWW                   | Beerwell #2    | Distillate         | 420,000 gal/hr  | CE-420A<br>CE-420B | CO <sub>2</sub> Scrubber<br>RTO | Yes                                 |

<sup>1</sup> All emission units associated with this emission point are "EU-420."

<sup>2</sup> ADM was required to submit a Notification of Compliance Summary (NOCS) for SEP-420 as a condition of the original PSD permit for this source (#07-A-541-P). This NOCS was submitted on November 18, 2010. The full emission unit list included in this permit reflects changes to the NESHAP Subpart FFFF applicability reported in the NOCS.

### 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.*

**Table Dry Mill 17. Opacity and Particulate Matter Emission Limits.**

| EP      | EU  | Opacity         | PM <sub>10</sub>   | Particulate Matter                                  | Authority for Requirement      |
|---------|-----|-----------------|--|---|--------------------------------|
| SEP-420 | All | 0% <sup>1</sup> | 0.003 gr/dscf <sup>2</sup><br>2.69 tpy <sup>3</sup><br>0.61 lb/hr <sup>4</sup> | 0.003 gr/dscf <sup>2</sup><br>2.69 tpy <sup>3</sup> | DNR PSD Permit<br>#07-A-541-P1 |

**Table Dry Mill 18. Other Emission Limits.**

| EP      | EU  | Pollutant       | Emission Limit(s)  | Authority for Requirement      |
|---------|-----|-----------------|--|--------------------------------|
| SEP-420 | All | SO <sub>2</sub> | 90% reduction <sup>2,4</sup> or 10 ppm <sub>v</sub> <sup>2</sup><br>9.59 tpy <sup>3</sup><br>2.21 lb/hr <sup>4</sup> | DNR PSD Permit<br>#07-A-541-P1 |
|         |     | NO <sub>x</sub> | 1.8 lb/hr <sup>2</sup> and 6.3 ppm <sub>v</sub> <sup>2,6</sup><br>7.73 tpy <sup>3</sup><br>1.80 lb/hr <sup>4</sup>   | DNR PSD Permit<br>#07-A-541-P1 |
|         |     | CO              | 1.8 lb/hr <sup>2</sup> and 10.3 ppm <sub>v</sub> <sup>2,6</sup><br>6.49 tpy <sup>3</sup><br>1.80 lb/hr <sup>4</sup>  | DNR PSD Permit<br>#07-A-541-P1 |
|         |     | VOC             | 98% reduction <sup>2,7</sup> or 3.35 lb/hr <sup>2,8</sup><br>14.70 tpy <sup>3</sup>                                  | DNR PSD Permit<br>#07-A-541-P1 |
|         |     | Organic HAP     | ≥ 98% reduction or ≤ 20 ppm <sub>v</sub> <sup>2,9</sup>  | DNR PSD Permit<br>#07-A-541-P1 |

**Table Dry Mill 19. General Emission Limits.**

| EP      | EU  | Pollutant       | Emission Limit(s)    | Authority for Requirement               |
|---------|-----|-----------------|----------------------|---|
| SEP-420 | All | Opacity         | 40%                  | 567 IAC 23.3(2)"d"                      |
|         |     |                 | 20%                  | LCO 10.7                                |
|         |     | PM              | 0.1 gr/dscf          | 567 IAC 23.3(2)"a"(2)<br>LCO 10.9(1)"a" |
|         |     | SO <sub>2</sub> | 500 ppm <sub>v</sub> | 567 IAC 23.3(3)"e"<br>LCO 10.12(2)      |

<sup>1</sup> Standard is expressed as a six-minute average.

<sup>2</sup> Standard is expressed as the average of 3 test runs.

<sup>3</sup> Ton per year limits correlate to an annual production limit of 420,000,000 gallons of denatured ethanol each 12-month rolling period.

<sup>4</sup> The limit for PM<sub>10</sub> emissions is established to limit emissions below levels that predict exceedances of the 24-hour NAAQS, the 24-hour increment, and the annual increment for PM<sub>10</sub>. The limit for SO<sub>2</sub> emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24-hour, and annual NAAQS and increment for SO<sub>2</sub>. The limit for NO<sub>x</sub> emissions is established to limit emissions below levels that predict exceedances of the annual NAAQS and increment for NO<sub>x</sub>. The limit for CO emissions is established to limit emissions below levels that predict exceedances of the 1-hour and 8-hour NAAQS for CO.

<sup>5</sup> The percent reduction limit applies across the CO<sub>2</sub> Scrubber (CE-420A) and the Distillation NCG Scrubber (CE-420C). The 10 ppm<sub>v</sub> concentration limit is the limit from the exhaust of the RTO (CE-420B).

<sup>6</sup> The NO<sub>x</sub> and CO standards apply at all times, except during periods of startup, shutdown, or malfunction. During periods of startup, shutdown, or malfunction, an emission limit of 18.9 ppm<sub>v</sub> applies for NO<sub>x</sub> and a limit of 41.3 ppm<sub>v</sub> applies for CO.

<sup>7</sup> The percent reduction limit applies across the RTO (CE-420B).

<sup>8</sup> The pound per hour limit is the limit from the exhaust of the RTO (CE-420B).

<sup>9</sup> Per Table 1 to Subpart FFFF of 40 CFR Part 63. Reduce emissions of total organic HAP by ≥ 98%, by weight, or to an outlet concentration of ≤ 20 ppm<sub>v</sub>, as organic HAP or TOC, by venting emissions through a closed-vent system to any combination of control devices, except a flare.

## **Operational Limits & Requirements**

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

### **Control Device:**

A carbon dioxide scrubber and regenerative thermal oxidizer shall be used to control volatile organic compound emissions. A distillation scrubber shall be used to control sulfur dioxide emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: LCPH ATI 5197 / PTO 6270

### **NSPS and NESHAP Applicability:**

These emission units, as detailed in 'Emission Unit Description' of this permit, are subject to Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards of Hazardous Air Pollutants (NESHAP) and Subpart FFFF - Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and are also subject to the requirements of 567 IAC 23.1(4)"cf". Not all of the general provisions in Subpart A are applicable to sources subject to the requirements of Subpart FFFF. See Table 12 to Subpart FFFF of 40 CFR §63 for a detailed listing of which general provisions are applicable.

Authority for Requirement: DNR PSD Permit #07-A-541-P1

### **Operating Requirements with Associated Monitoring and 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The ADM Ethanol Dry Mill located at Plant Number 57-01-080 shall not produce more than 420,000,000 gallons of denatured ethanol per rolling 12-month period. Record monthly, the amount of denatured ethanol produced at the ADM Ethanol Dry Mill located at Plant Number 57-01-080 in gallons. Calculate and record 12-month rolling totals.
- B. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment and the monitoring devices.
- C. The Regenerative Thermal Oxidizer (CE-420B), CO<sub>2</sub> Scrubber (CE-420A), and the Distillation NCG Scrubber (CE-420C) shall be operated at all times the equipment each device controls is in operation.
- D. The CO<sub>2</sub> Scrubber (CE-420A) scrubbant flow rate and the Distillation NCG Scrubber (CE-420C) scrubbant shall be maintained at or above the average flow rate, measured in gallons per hour, during the most recent performance test that demonstrates compliance with the permitted emission limits. Records of the average scrubbant flow rate observed for each scrubber during the last successful compliance test will be maintained for reference.



- E. The owner or operator shall properly operate and maintain equipment to continuously monitor and record the scrubbant flow rate for the CO<sub>2</sub> Scrubber and the Distillation NCG Scrubber. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, or per written facility-specific operation and maintenance plan. This requirement shall not apply on the days that the scrubbers, or the equipment the scrubbers control, are not in operation.
- F. The CO<sub>2</sub> Scrubber (CE-420A) scrubbant pH shall be maintained at a minimum pH of 3.5, three-hour rolling average. The owner or operator shall properly operate and maintain equipment to continuously monitor and record the scrubbant pH, in standard units, for the CO<sub>2</sub> Scrubber. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, or per written facility-specific operating and maintenance plan. This requirement shall not apply on the days that the CO<sub>2</sub> Scrubber or the equipment that the CO<sub>2</sub> Scrubber controls is not in operation.
- G. The Regenerative Thermal Oxidizer shall only combust natural gas, including natural gas mixed with biogas from the wastewater treatment plant, process off-gasses, and combustion air.
- H. The Regenerative Thermal Oxidizer shall maintain a temperature (3-hour average) during operation of no lower than 50 degrees Fahrenheit of the average temperature of the oxidizer recorded during the most recent performance test which demonstrated compliance with the emission limits.
- I. The owner or operator shall keep three-hour block records of the operating temperature of the thermal oxidizer, and record all three-hour periods (during actual operations) during which the average temperature of the thermal oxidizer is more than 50 degrees Fahrenheit below the average temperature of the oxidizer during its most recent performance test which demonstrated compliance with the emission limits.
- J. The owner or operator shall keep records of the frequency and amount of time the thermal oxidizer malfunctions and estimate the emissions emitted during these malfunctions.
- K. These emission units, as detailed in [Table Dry Mill 16], are subject to all applicable operating limits set forth in NESHAP Subpart A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2430 through 40 CFR §63.2550).
- L. Per 40 CFR §63.2450, for the closed vent system and Regenerative Thermal Oxidizer, the facility shall meet the requirements of 40 CFR §63.928(b) and the requirements referenced therein.
- M. Per 40 CFR §63.2455 and 40 CFR §63.2460, the facility shall meet all of the applicable operating requirements in Table 1 and 2 of NESHAP Subpart FFFF.
- N. The facility must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 CFR §63.6(e). Per 40 CFR §63.2525(j), the SSMP is not required to included Group 2 emission points, unless those emission points are used in an emissions average, and for equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

- O. The owner or operator shall furnish the Department with final detailed plans and specifications for all emission control equipment selected by the owner to meet the emission limits contained in [Table Dry Mill 17], [Table Dry Mill 18], and [Table Dry Mill 19]. In addition, the facility shall detail all revisions made to the affected emission units and provide a startup, shutdown, and malfunction plan for the emission unit and control device. This information shall be submitted to the Department at least 30 days in advance of construction of any control equipment.
- P. These emission units, as detailed in [Table Dry Mill 16], are subject to all applicable recordkeeping, notification, and reporting requirements as set forth in NESHAP Subpart A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2515, 40 CFR §2520, and 40 CFR §63.2525).

Authority for Requirement: DNR PSD Permit #07-A-541-P1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 100

Discharge Style: Vertical, unobstructed

Stack Opening, (diameter, inches): 60

Exhaust Temperature (°F): 190

Exhaust Flow Rate (scfm): 63,850

Authority for Requirement: DNR PSD Permit #07-A-541-P

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

The following stack testing shall be performed:

**Table Dry Mill 20. Required Stack Testing.**

| <b>Pollutant</b> | <b>1<sup>st</sup> Stack Test to be Completed by</b> | <b>Test Method</b>   |
|------------------|---|--|
| PM               | Within first two years of permit term               | 40 CFR 60, Appendix A, Method 5<br>40 CFR 51, Appendix M, Method 202 |
| PM <sub>10</sub> | Within first two years of permit term               | 40 CFR 51, Appendix M, Methods 201A w/ 202                           |
| SO <sub>2</sub>  | Within first two years of permit term               | 40 CFR 60, Appendix A, Method 6C                                     |
| CO               | Within first two years of permit term               | 40 CFR 60, Appendix A, Method 10                                     |

Authority for Requirement: 567 IAC 22.108(3)

**Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes <sup>1</sup> No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

<sup>1</sup> Facility maintained operation and maintenance plans are required for SO<sub>2</sub> and VOC.

*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: SEP-422, SEP-423****Process Area: DRY MILL****Table Dry Mill 21. Associated Equipment.**

| EP      | EU     | EU Description | Raw Material /Fuel | Rated Capacity | CE     | CE Description |
|---------|--------|----------------|--------------------|----------------|--------|----------------|
| SEP-422 | EU-422 | DDGS Cooler #1 | DDGS               | 106 ton/hr     | CE-422 | Baghouse       |
| SEP-423 | EU-423 | DDGS Cooler #2 | DDGS               | 106 ton/hr     | CE-423 | Baghouse       |

**Applicable Requirements****Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)***The emissions from each emission point shall not exceed the levels specified below.***Table Dry Mill 22. Opacity Emission Limits.**

| EP      | EU     | Opacity           | Authority for Requirement   |
|---------|--------|-------------------|-----------------------------|
| SEP-422 | EU-422 | 0% <sup>1,2</sup> | DNR PSD Permit #07-A-543-P3 |
| SEP-423 | EU-423 |                   | DNR PSD Permit #07-A-544-P3 |

**Table Dry Mill 23. Particulate Matter Emission Limits.**

| EP      | EU     | PM <sub>10</sub>           | PM <sub>2.5</sub>          | Particulate Matter         | Authority for Requirement                                  |
|---------|--------|----------------------------|----------------------------|----------------------------|--|
| SEP-422 | EU-422 | 0.004 gr/dscf <sup>3</sup> | 0.004 gr/dscf <sup>3</sup> | 0.004 gr/dscf <sup>3</sup> | DNR PSD Permit #07-A-543-P3<br>DNR PSD Permit #07-A-544-P3 |
| SEP-423 | EU-423 | 1.54 lb/hr                 |                            |                            |  |

**Table Dry Mill 24. Other Emission Limits.**

| EP      | EU     | Pollutant       | Emission Limit(s)   | Authority for Requirement                                  |
|---------|--------|-----------------|---|--|
| SEP-422 | EU-422 | SO <sub>2</sub> | 10 ppm <sub>vd</sub> <sup>3</sup>                                     | DNR PSD Permit #07-A-543-P3                                |
| SEP-423 | EU-423 |                 | 4.68 lb/hr  | DNR PSD Permit #07-A-544-P3                                |
|         |        | VOC             | 45 ppm <sub>vd</sub> <sup>3,4</sup> or<br>0.216 lb/ton <sup>3,4</sup> | DNR PSD Permit #07-A-543-P3<br>DNR PSD Permit #07-A-544-P3 |
|         |        | Acetaldehyde    | 0.64 lb/hr <sup>5</sup>   | DNR PSD Permit #07-A-543-P3<br>DNR PSD Permit #07-A-544-P3 |
|         |        | Acrolein        | 0.98 lb/hr <sup>5</sup>   | DNR PSD Permit #07-A-543-P3<br>DNR PSD Permit #07-A-544-P3 |
|         |        | Formaldehyde    | 1.06 lb/hr <sup>5</sup>   | DNR PSD Permit #07-A-543-P3<br>DNR PSD Permit #07-A-544-P3 |
|         |        | Methanol        | 1.08 lb/hr <sup>5</sup>   | DNR PSD Permit #07-A-543-P3<br>DNR PSD Permit #07-A-544-P3 |
|         |        | Total HAP       | 2.48 lb/hr <sup>5</sup>   | DNR PSD Permit #07-A-543-P3<br>DNR PSD Permit #07-A-544-P3 |

**Table Dry Mill 25. General Emission Limits.**

| EP      | EU     | Pollutant       | Emission Limit(s)    | Authority for Requirement               |
|---------|--------|-----------------|----------------------|---|
| SEP-422 | EU-422 | Opacity         | 40%                  | 567 IAC 23.3(2)"d"                      |
| SEP-423 | EU-423 |                 | 20%                  | LCO 10.7                                |
|         |        | PM              | 0.1 gr/dscf          | 567 IAC 23.3(2)"a"(2)<br>LCO 10.9(1)"a" |
|         |        | SO <sub>2</sub> | 500 ppm <sub>v</sub> | 567 IAC 23.3(3)"e"<br>LCO 10.12(2)      |

<sup>1</sup> The emission limit is a six (6) minute average.

<sup>2</sup> An exceedance of the indicator opacity of "no visible emissions" from the emission points 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).

<sup>3</sup> The emission limit is expressed as the average of three (3) runs.

<sup>4</sup> This is combined for DDGS Coolers 1 & 2.

<sup>5</sup> Emission limit is a combined total for DDGS Coolers 1 & 2.

**Operational Limits & Requirements**

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

**Control Device:**

A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: LCPH ATI 6785  
LCPH ATI 6786

**Operating Limits:**

*Operating limits for this unit shall be:*

- A. The owner or operator shall furnish the Department with final detailed plans and specifications for all emission control equipment selected by the owner to meet the emission limits contained in **Table Dry Mill 22 through 25**. In addition, the facility shall detail all revisions made to the affected emission units. This information shall be submitted to the Department at least 30 days in advance of construction of any control equipment.
- B. The differential pressure across the control equipment, CE-422 and CE-423, shall be maintained between 0.5 inches of water column and 8 inches of water column, with the exception of unit startup.
- C. The control equipment shall be maintained according to the manufacturer's specifications and good operating practices.

Authority for Requirement: DNR PSD Permit #07-A-543-P3  
DNR PSD Permit #07-A-544-P3

**Operating Condition Monitoring and 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. Record monthly the total amount of DDGS processed in the coolers, EU-422 and EU-423. Calculate and record VOC emissions from the coolers in tons on a monthly basis and record the 12-month rolling total.
- B. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.
- C. The owner or operator shall properly operate and maintain equipment to continuously monitor the baghouse pressure drop. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, or per written facility-specific operation and maintenance plan.
- D. The owner or operator shall collect and record the baghouse pressure drop, in inches of water column, on a continuous basis. This requirement shall not apply on the days that the baghouse, or the equipment that the baghouse controls, is not in operation.
- E. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment and the monitoring devices.
- F. The owner or operator shall maintain a record of the range of baghouse pressure drop observed during the last successful compliance test for reference.

Authority for Requirement: DNR PSD Permit #07-A-543-P3  
 DNR PSD Permit #07-A-544-P3

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**Table Dry Mill 26.**

| EP      | LCPH<br>ATI / PTO<br>Numbers | Stack Characteristics                      |                           |                                       |                          |                                |
|---------|------------------------------|--|---------------------------|---------------------------------------|--------------------------|--------------------------------|
|         |                              | Stack<br>Height<br>(feet, above<br>ground) | Discharge<br>Style        | Stack<br>Opening<br>(inches,<br>dia.) | Exhaust<br>Temp.<br>(°F) | Exhaust<br>Flow Rate<br>(scfm) |
| SEP-422 | 6785 / 0                     | 100  | Vertical,<br>unobstructed | 48                                    | 153                      | 46,940                         |
| SEP-423 | 6786 / 0                     | 100  | Vertical,<br>unobstructed | 48                                    | 153                      | 46,940                         |

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall

submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

The following stack tests shall be performed:

**Table Dry Mill 27. Required Stack Testing.**

| <b>Pollutant</b> | <b>1<sup>st</sup> Stack Test to be Completed by</b> | <b>Test Method</b>   |
|------------------|---|--|
| PM               | Within first two years of permit term <sup>1</sup>  | 40 CFR 60, Appendix A, Method 5<br>40 CFR 51, Appendix M, Method 202 |
| PM <sub>10</sub> | Within first two years of permit term <sup>1</sup>  | 40 CFR 51, Appendix M, Methods 201A w/ 202                           |
| VOC              | Within first two years of permit term <sup>1</sup>  | 40 CFR 60, Appendix A, Method 25A                                    |

<sup>1</sup> Testing was completed on October 10 and 11, 2016 for PM, PM<sub>10</sub>, VOC, and HAP. The results were submitted to LCPH on November 30, 2016 and are currently pending review. The results from this test will be considered sufficient to meet the testing requirement above, so long as the results meet the established emission limits. If the results show an exceedance, additional stack testing will be required.

Authority for Requirement: 567 IAC 22.108(3)

**Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No   
**Facility Maintained Operation & Maintenance Plan Required?** Yes  No   
**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No <sup>1</sup>

<sup>1</sup> CAM has been waived. DNR PSD Permits #07-A-543-P3 and #07-A-544-P3 have CAM equivalent monitoring and recordkeeping required.

Authority for Requirement: 567 IAC 22.108(3)



**Emission Point ID Number: SEP-425, SEP-426, SEP-427, SEP-428, SEP-429**  
**Process Area: DRY MILL**

**Table Dry Mill 28. Associated Equipment.**

| EP      | EU     | EU Description               | Raw Material /Fuel | Rated Capacity             | CE                 | CE Description  |
|---------|--------|------------------------------|--------------------|----------------------------|--------------------|---|
| SEP-425 | EU-425 | Indirect-Fired DDGS Dryer #1 | DDGS               | 63 ton/hr<br>95.5 MMBtu/hr | CE-425A<br>CE-425B | Low NO <sub>x</sub> with FGR Dryer Combustion Chamber |
| SEP-426 | EU-426 | Indirect-Fired DDGS Dryer #2 | DDGS               | 63 ton/hr<br>95.5 MMBtu/hr | CE-426A<br>CE-426B | Low NO <sub>x</sub> with FGR Dryer Combustion Chamber |
| SEP-427 | EU-427 | Indirect-Fired DDGS Dryer #3 | DDGS               | 63 ton/hr<br>95.5 MMBtu/hr | CE-427A<br>CE-427B | Low NO <sub>x</sub> with FGR Dryer Combustion Chamber |
| SEP-428 | EU-428 | Indirect-Fired DDGS Dryer #4 | DDGS               | 63 ton/hr<br>95.5 MMBtu/hr | CE-428A<br>CE-428B | Low NO <sub>x</sub> with FGR Dryer Combustion Chamber |
| SEP-429 | EU-429 | Indirect-Fired DDGS Dryer #5 | DDGS               | 63 ton/hr<br>95.5 MMBtu/hr | CE-429A<br>CE-429B | Low NO <sub>x</sub> with FGR Dryer Combustion Chamber |

**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.*

**Table Dry Mill 29. Opacity and Particulate Matter Emission Limits.**

| EP      | EU     | Opacity         | PM <sub>10</sub>           | Particulate Matter         | Authority for Requirement  |
|---------|--------|-----------------|----------------------------|----------------------------|----------------------------|
| SEP-425 | EU-425 | 0% <sup>1</sup> | 0.015 gr/dscf <sup>2</sup> | 0.015 gr/dscf <sup>2</sup> | DNR PSD Permit #07-A-546-P |
| SEP-426 | EU-426 |                 |                            |                            | DNR PSD Permit #07-A-547-P |
| SEP-427 | EU-427 |                 |                            |                            | DNR PSD Permit #07-A-548-P |
| SEP-428 | EU-428 |                 |                            |                            | DNR PSD Permit #07-A-549-P |
| SEP-429 | EU-429 |                 |                            |                            | DNR PSD Permit #07-A-550-P |
|         |        |                 |                            | 0.03 lb/MMBtu <sup>3</sup> | 40 CFR §60.43c             |

**Table Dry Mill 30. Sulfur Dioxide, Nitrogen Oxides, and Carbon Monoxide Emission Limits.**

| EP      | EU     | SO <sub>2</sub>    | NO <sub>x</sub>         | CO                       | Authority for Requirement  |
|---------|--------|--------------------|-------------------------|--------------------------|----------------------------|
| SEP-425 | EU-425 | 6.0                | 0.04                    | 0.10                     | DNR PSD Permit #07-A-546-P |
| SEP-426 | EU-426 | ppm <sub>vd</sub>  | lb/MMBtu                | lb/MMBtu                 | DNR PSD Permit #07-A-547-P |
| SEP-427 | EU-427 | 1.01               | 3.75 lb/hr <sup>4</sup> | 10.31 lb/hr <sup>4</sup> | DNR PSD Permit #07-A-548-P |
| SEP-428 | EU-428 | lb/hr <sup>4</sup> |                         |                          | DNR PSD Permit #07-A-549-P |
| SEP-429 | EU-429 |                    |                         |                          | DNR PSD Permit #07-A-550-P |

**Table Dry Mill 31. Other Emission Limits.**

| EP      | EU     | VOC  | Authority for Requirement  |
|---------|--------|--|----------------------------|
| SEP-425 | EU-425 | 98% reduction <sup>5</sup> and 3.16 lb/hr <sup>6</sup> | DNR PSD Permit #07-A-546-P |
| SEP-426 | EU-426 |  | DNR PSD Permit #07-A-547-P |
| SEP-427 | EU-427 |  | DNR PSD Permit #07-A-548-P |
| SEP-428 | EU-428 |  | DNR PSD Permit #07-A-549-P |
| SEP-429 | EU-429 |  | DNR PSD Permit #07-A-550-P |

**Table Dry Mill 32. General Emission Limits.**

| EP      | EU     | Pollutant       | Emission Limit(s)    | Authority for Requirement          |
|---------|--------|-----------------|----------------------|------------------------------------|
| SEP-425 | EU-425 | Opacity         | 40%                  | 567 IAC 23.3(2)"d"                 |
| SEP-426 | EU-426 |                 | 20%                  | LCO 10.7                           |
| SEP-427 | EU-427 | PM              | 0.6 lb/MMBtu         | 567 IAC 23.3(2)"b"(2)              |
| SEP-428 | EU-428 |                 | 0.356 lb/MMBtu       | LCO 10.8(2)"b"                     |
| SEP-429 | EU-429 | SO <sub>2</sub> | 500 ppm <sub>v</sub> | 567 IAC 23.3(3)"e"<br>LCO 10.12(2) |

<sup>1</sup> Standard is expressed as a six-minute average.

<sup>2</sup> Standard is expressed as the average of 3 test runs.

<sup>3</sup> Standard is expressed as the average of 3 test runs and applies at all times except during startup, shutdown, or malfunction.

<sup>4</sup> The limit for PM<sub>10</sub> emissions is established to limit emissions below levels that predict exceedances of the 24-hour NAAQS, the 24-hour increment, and the annual increment for PM<sub>10</sub>. The limit for SO<sub>2</sub> emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24-hour, and annual NAAQS and increment for SO<sub>2</sub>. The limit for NO<sub>x</sub> emissions is established to limit emissions below levels that predict exceedances of the annual NAAQS and increment for NO<sub>x</sub>. The limit for CO emissions is established to limit emissions below levels that predict exceedances of the 1-hour and 8-hour NAAQS for CO.

<sup>5</sup> The percent reduction limit applies to the dryer process gas bleed stream (i.e., the gas in direct contact with the DDGS being dried in the dryer, which is routed to the combustion chamber in the process gas control). It is to be determined based on the measurement of the mass of VOC in the process gas exiting the dryer process loop and the mass of VOC in the flue gas exiting the dryer combustion chamber. The mass of VOC in the gas exiting the chamber may be adjusted downward to account for VOC produced by combustion of the fuel gas in the combustion chamber.

<sup>6</sup> The pound per hour limit is the limit from the exhaust of the dryer combustion chamber (CE-425B, CE-426B, CE-427B, CE-428B, and CE-429B).

### **Operational Limits & Requirements**

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

#### **Control Device:**

Low NO<sub>x</sub> burners with flue gas recirculation will be used to reduce nitrogen oxides emissions. A dryer combustion chamber will be used to reduce volatile organic compound emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: DNR PSD Permit #07-A-546-P  
DNR PSD Permit #07-A-547-P  
DNR PSD Permit #07-A-548-P  
DNR PSD Permit #07-A-549-P  
DNR PSD Permit #07-A-550-P

**NSPS and NESHAP Applicability:**

This emission unit is subject to Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS) and Subpart Dc - Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units (40 CFR §60.40c through 40 CFR §60.48c) and is also subject to the requirements of 567 IAC 23.1(2)"lll".

As provided in 40 CFR §63.7480 through 40 CFR §63.7570, this emission unit is subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart DDDDD - Industrial, Commercial, and Institutional Boilers and Process Heaters as a existing large gaseous fuel unit with a heat input less than 100 MMBtu/hr. This emission unit is also subject to Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15) and is also subject to the requirements of 567 IAC 23.1(4)"dd".

Authority for Requirement: DNR PSD Permit #07-A-546-P  
DNR PSD Permit #07-A-547-P  
DNR PSD Permit #07-A-548-P  
DNR PSD Permit #07-A-549-P  
DNR PSD Permit #07-A-550-P

**Operating Limits:**

- A. DDGS Dryers #1, #2, #3, #4, and #5 shall not operate at less than 35% load (i.e., operate while firing less than 35% of the maximum firing rate of the dryer).
- B. The combustion chamber of DDGS Dryers #1, #2, #3, #4, and #5 shall maintain a temperature (3-hour average), measured at the exit of the combustion chamber, during operation of no more than 50 degrees Fahrenheit below the average temperature measured at this location during the most recent performance test which demonstrated compliance with the emission limits.
- C. The owner or operator shall furnish the Department with final detailed plans and specifications for all emission control equipment selected by the owner to meet the emission limits contained in **Table Dry Mill 29 through 32**. In addition, the facility shall detail all revisions made to the affected emission units and provide a startup, shutdown, and malfunction plan for the emission unit and control device. This information shall be submitted to the Department at least 30 days in advance of construction of any control equipment.
- D. The owner or operator shall operate and maintain the DDGS Dryers #1, #2, #3, #4, and #5 according to the provisions in 40 CFR §63.6(e).
- E. The owner or operator shall develop and implement a written startup, shutdown, and malfunction plan (SSMP) for the DDGS Dryers #1, #2, #3, #4, and #5 according to the provisions in 40 CFR §63.6(e).

- F. DDGS Dryers #1, #2, #3, #4, and #5 shall only combust natural gas, including natural gas mixed with biogas from the wastewater treatment plant, process off-gases, and combustion air.

Authority for Requirement: DNR PSD Permit #07-A-546-P  
DNR PSD Permit #07-A-547-P  
DNR PSD Permit #07-A-548-P  
DNR PSD Permit #07-A-549-P  
DNR PSD Permit #07-A-550-P

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall keep hourly records of the operating temperature of the dryer's combustion chamber and record all periods (during actual operations) where the 3-hour average temperature is more than 50 degrees Fahrenheit below the average temperature recorded during the most recent performance test which demonstrated compliance with the emission limits.
- B. The owner or operator shall maintain a record of the average temperature of the dryer's combustion chamber observed during the most recent performance test which demonstrated compliance with the emission limits for reference.
- C. The owner or operator shall collect and record the amount of fuel fired in the burners, in percent of total possible fuel fired, continuously for DDGS Dryers #1, #2, #3, #4, and #5. This requirement shall not apply on the days the dryer is not in operation.
- D. The owner or operator shall maintain records of monthly fuel use by DDGS Dryers #1, #2, #3, #4, and #5, including the type of fuel and amount, according to 40 CFR §60.48c, 40 CFR §63.7555, and 40 CFR §63.7560.
- E. Retain a certified statement signed by the owner or operator of the affected source that the records of fuel supplier certifications represent all of the fuel combusted during the reporting period.
- F. The owner or operator shall follow the reporting requirements of 40 CFR §60.48c and 40 CFR §63.7550.
- G. The reporting period for the reports required under this Subpart is each 6-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period, per 40 CFR §60.48c(j). The reports shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period and fuel supplier certifications.

H. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment and the monitoring devices.

Authority for Requirement: DNR PSD Permit #07-A-546-P  
 DNR PSD Permit #07-A-547-P  
 DNR PSD Permit #07-A-548-P  
 DNR PSD Permit #07-A-549-P  
 DNR PSD Permit #07-A-550-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**Table Dry Mill 33.**

| EP      | LCPH<br>ATI / PTO<br>Numbers | Stack Characteristics                      |                           |                                       |                          |                                |
|---------|------------------------------|--|---------------------------|---------------------------------------|--------------------------|--------------------------------|
|         |                              | Stack<br>Height<br>(feet, above<br>ground) | Discharge<br>Style        | Stack<br>Opening<br>(inches,<br>dia.) | Exhaust<br>Temp.<br>(°F) | Exhaust<br>Flow Rate<br>(acfm) |
| SEP-425 | 5202 / 6277                  | 180  | Vertical,<br>unobstructed | 42                                    | 450                      | 22,740                         |
| SEP-426 | 5203 / 6279                  | 180  | Vertical,<br>unobstructed | 42                                    | 450                      | 22,740                         |
| SEP-427 | 5204 / 6281                  | 180  | Vertical,<br>unobstructed | 42                                    | 450                      | 22,740                         |
| SEP-428 | 5205 / 6282                  | 180  | Vertical,<br>unobstructed | 42                                    | 450                      | 22,740                         |
| SEP-429 | 5206 / 6284                  | 180  | Vertical,<br>unobstructed | 42                                    | 450                      | 22,740                         |

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

The following stack tests shall be performed on SEP-427 only:

- Pollutant – Volatile Organic Compounds (VOC)
- 1<sup>st</sup> Stack Test to be Completed by – within first two years of permit term
- Test Method – Method 25A (40 CFR Part 60, Appendix A)
- Authority for Requirement – 567 IAC 22.108(3)

**Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes <sup>1</sup> No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

<sup>1</sup> Facility maintained operation and maintenance plan required for NO<sub>x</sub>.

*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: SEP-440, SEP-441, SEP-442, SEP-443, SEP-444, SEP-445, SEP-447, SEP-448, SEP-449**

**Process Area: DRY MILL**

**Table Dry Mill 34. Associated Equipment.**

| EP      | EU     | EU Description                       | Raw Material/Fuel   | Rated Capacity    | CE     | CE Description         |
|---------|--------|--------------------------------------|---------------------|-------------------|--------|------------------------|
| SEP-440 | EU-440 | Alcohol Process Day Tank #1          | 200° Ethanol        | 500,000 gallons   | CE-440 | Internal Floating Roof |
| SEP-441 | EU-441 | Alcohol Process Day Tank #2          | 200° Ethanol        | 500,000 gallons   | CE-441 | Internal Floating Roof |
| SEP-442 | EU-442 | Alcohol Process Quality Control Tank | Denatured Ethanol   | 500,000 gallons   | CE-442 | Internal Floating Roof |
| SEP-443 | EU-443 | Alcohol Process Reclaim Tank         | Denatured Ethanol   | 500,000 gallons   | CE-443 | Internal Floating Roof |
| SEP-444 | EU-444 | Alcohol Storage Tank #1              | Denatured Ethanol   | 2,117,000 gallons | CE-444 | Internal Floating Roof |
| SEP-445 | EU-445 | Alcohol Storage Tank #2              | Denatured Ethanol   | 2,117,000 gallons | CE-445 | Internal Floating Roof |
| SEP-447 | EU-447 | Denaturant Storage Tank              | Denaturant          | 500,000 gallons   | CE-447 | Internal Floating Roof |
| SEP-448 | EU-448 | Corrosion Inhibitor Storage Tank     | Corrosion Inhibitor | 8,500 gallons     | None   | None                   |
| SEP-449 | EU-449 | 190° Alcohol Process Tank            | 190° Ethanol        | 100,000 gallons   | CE-449 | Internal Floating Roof |

**Applicable Requirements**

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

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

**Table Dry Mill 35. Emission Limits.**

| EP      | EU     | VOC <sup>1</sup> | Authority for Requirement   |
|---------|--------|------------------|-----------------------------|
| SEP-440 | EU-440 | 1.14 tpy         | DNR PSD Permit #07-A-560-P  |
| SEP-441 | EU-441 |                  | DNR PSD Permit #07-A-561-P  |
| SEP-442 | EU-442 | 1.22 tpy         | DNR PSD Permit #07-A-562-P  |
| SEP-443 | EU-443 |                  | DNR PSD Permit #07-A-563-P  |
| SEP-444 | EU-444 | 1.26 tpy         | DNR PSD Permit #07-A-564-P1 |
| SEP-445 | EU-445 |                  | DNR PSD Permit #07-A-565-P1 |
| SEP-447 | EU-447 | 0.607 tpy        | DNR PSD Permit #07-A-567-P1 |
| SEP-448 | EU-448 | 0.85 tpy         | DNR PSD Permit #07-A-568-P  |
| SEP-449 | EU-449 | 3.18 tpy         | DNR PSD Permit #07-A-569-P  |

<sup>1</sup> Standard is expressed as a 12-month rolling total.

## **Operational Limits & Requirements**

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

### **Control Device:**

*SEP-440, SEP-441, SEP-442, SEP-443, SEP-444, SEP-445, SEP-447, SEP-449*

An internal floating roof will be used to reduce volatile organic compound emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: LCPH ATI 5217 / PTO 6285  
LCPH ATI 5218 / PTO 6286  
LCPH ATI 5219 / PTO 6287  
LCPH ATI 5220 / PTO 6288  
LCPH ATI 6615 / PTO 6525  
LCPH ATI 6616 / PTO 6526  
LCPH ATI 6617 / PTO 6527  
LCPH ATI 5227 / PTO 6290

### **NSPS Applicability:**

*SEP-440, SEP-441, SEP-442, SEP-443, SEP-444, SEP-445, SEP-447, SEP-449*

These emission units are subject to Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS) and Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (40 CFR §60.110b through 40 CFR §60.117b) and is also subject to the requirements of 567 IAC 23.1(2)"ddd".

Authority for Requirement: DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-565-P1  
DNR PSD Permit #07-A-567-P1  
DNR PSD Permit #07-A-569-P

### *SEP-448*

This emission unit is not subject to any New Source Performance Standards (NSPS) at this time. There are no applicable Subparts.

Authority for Requirement: DNR PSD Permit #07-A-568-P, LCPH ATI 5226 / PTO 6289

### **NESHAP Applicability:**

*SEP-440, SEP-441, SEP-442, SEP-443, SEP-444, SEP-445, SEP-447, SEP-448, SEP-449*

These emission units are subject to Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §60.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF - Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". Not all of the



general provisions in Subpart A are applicable to sources subject to the requirements of Subpart FFFF. See Table 12 to Subpart FFFF of 40 CFR §63 for a detailed listing of which general provisions are applicable.

Authority for Requirement: DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-565-P1  
DNR PSD Permit #07-A-567-P1  
DNR PSD Permit #07-A-568-P  
DNR PSD Permit #07-A-569-P

*SEP-440, SEP-441, SEP-442, SEP-443, SEP-444, SEP-445, SEP-447, SEP-449*

After the compliance dates specified in 40 CFR §63.2445, compliance with the provisions of NESHAP Subpart FFFF for any storage tank that is assigned to an MCPU and that is controlled with a floating roof can be demonstrated by demonstrating compliance with the provisions of 40 CFR §60 Subpart Kb. Alternatively, compliance with NSPS Subpart Kb may be demonstrated by complying only with the requirements for Group 1 storage tanks in NESHAP Subpart FFFF.

Authority for Requirement: DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-565-P1  
DNR PSD Permit #07-A-567-P1  
DNR PSD Permit #07-A-569-P

*SEP-440, SEP-441, SEP-449*

These emission units were initially determined to be a surge control vessel that does not meet the Group 1 storage tank thresholds. Final grouping determination and compliance status determined these tanks to be "exempt" from NESHAP Subpart FFFF requirements. This determination was documented in ADM's November 18, 2010 NOCS, as the maximum true vapor pressure of Total HAP at storage temperature is < 6.9 kPa<sup>1</sup>.

Authority for Requirement: NESHAP Subpart FFFF  
DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-569-P

*SEP-442, SEP-443*

This emission unit has initially been determined to be a surge control vessel that does not meet the Group 1 storage tank thresholds. Final grouping determination and compliance status will be determined once the facility is constructed<sup>2</sup>.

Authority for Requirement: NESHAP Subpart FFFF  
DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P

<sup>1</sup> DNR PSD Permits #07-A-560-P, #07-A-561-P, and #07-A-569-P initially stated SEP-440, SEP-441, and SEP-449 did not meet the Group 1 storage tank thresholds; however, these permits required "final determination and compliance status [to] be determined once the facility is constructed." ADM submitted this determination in their November 18, 2010 Notification of Compliance Summary (NOCS), in which they confirmed their initial determination of "exempt" status.

<sup>2</sup> DNR PSD Permits #07-A-562-P and #07-A-563-P initially stated SEP-442 and SEP-443 met the Group 1 storage tank thresholds; however, those permits required "final determination and compliance status [to] be determined once the facility is constructed." ADM did not include SEP-442 or SEP-443 in their November 18, 2010 NOCS. It is assumed that the initial determination is correct and these are Group 1 storage tanks for the purposes of NESHAP Subpart FFFF.

**Operating Limits:**

*SEP-440, SEP-441, SEP-442, SEP-443, SEP-444, SEP-445, SEP-447, SEP-448, SEP-449*

- A. This emission unit is subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2430 through 40 CFR §63.2550).

Authority for Requirement: DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-565-P1  
DNR PSD Permit #07-A-567-P1  
DNR PSD Permit #07-A-568-P  
DNR PSD Permit #07-A-569-P

*SEP-440, SEP-441, SEP-442, SEP-443, SEP-444, SEP-445, SEP-447, SEP-449*

- B. This emission unit is subject to all applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 through 40 CFR §60.19) and Kb (40 CFR §60.110b through 40 CFR §60.117b).
- C. The owner or operator shall maintain the control equipment according to manufacturer's specifications and maintenance schedule.

Authority for Requirement: DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-565-P1  
DNR PSD Permit #07-A-567-P1  
DNR PSD Permit #07-A-569-P

*SEP-440, SEP-441, SEP-449*

D. This emission unit and control device shall be designed and operated to meet the requirements of 40 CFR §60.112b(a)(1), as required by the best available control technology (BACT) analysis.

E. The facility shall comply with all applicable requirements for this emission unit, according to the provisions in 40 CFR §63.2450.

Authority for Requirement: DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-569-P

*SEP-442, SEP-443, SEP-444, SEP-445, SEP-447*

F. The tank shall be designed and operated to meet the requirements for an internal floating roof in 40 CFR §63.1062 through 40 CFR §63.1063 and 40 CFR §60.112b, as required by the best available control technology (BACT) analysis.

Authority for Requirement: DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-565-P1  
DNR PSD Permit #07-A-567-P1

*SEP-442, SEP-443*

G. The facility shall comply with all applicable requirements for this emission unit, according to the provisions in 40 CFR §63.2450 and 40 CFR §60.112b.

Authority for Requirement: DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-565-P1

*SEP-444, SEP-445, SEP-447*

H. The facility shall comply with all applicable requirements for the storage tank according to the provisions in 40 CFR §63.2470 and 40 CFR §60.112b.

Authority for Requirement: DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-567-P1

*SEP-448*

I. The facility shall comply with all applicable requirements for the storage tank, according to the provisions in 40 CFR §63.2470.

Authority for Requirement: DNR PSD Permit #07-A-568-P

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

*SEP-440, SEP-441, SEP-442, SEP-443, SEP-444, SEP-445, SEP-447, SEP-448, SEP-449*

- A. Record monthly the total amounts of 200° ethanol (SEP-440, SEP-441), denatured ethanol (SEP-442, SEP-443, SEP-444), denatured alcohol (SEP-445), denaturant (SEP-447), corrosion inhibitor (SEP-448), and 190° ethanol (SEP-449) processed through each individual emission unit each month, in gallons. Calculate VOC emissions, both working and breathing losses, from each tank, in tons, on a monthly basis, and record the 12-month rolling total.

Authority for Requirement: DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-565-P1  
DNR PSD Permit #07-A-567-P1  
DNR PSD Permit #07-A-568-P  
DNR PSD Permit #07-A-569-P

*SEP-440, SEP-441, SEP-442, SEP-443, SEP-444, SEP-445, SEP-447, SEP-449*

- B. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control device.

Authority for Requirement: DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-565-P1  
DNR PSD Permit #07-A-567-P1  
DNR PSD Permit #07-A-569-P

*SEP-440, SEP-441, SEP-449*

- C. The owner or operator of this tank shall follow the testing and observation procedures of 40 CFR §60.113b(a), as required by the best available control technology (BACT) analysis.
- D. This emission unit is subject to all applicable recordkeeping, notification, and reporting requirements, as set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2515, 40 CFR §63.2520, and 40 CFR §63.2525), and NSPS Subparts A (40 CFR §60.1 through 40 CFR §60.19) and Kb (40 CFR §60.115b and 40 CFR §60.116b). Reporting and recordkeeping shall include keeping the following records:
- E. Certification that the internal floating roof meets the specifications of 40 CFR §60.112b(a)(1) and 40 CFR §60.113(a)(1).
- F. A record of each inspection performed as required by 40 CFR §113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall include the date of the inspection and the observed condition of each component of the control equipment (seals, internal floating roof, fittings, etc.). If an

inspection finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects as listed in 40 CFR §60.113b(a)(3)(ii), the record shall include the reason the tank did not meet the specifications of 40 CFR §60.112b(a)(1) and 40 CFR §60.113b(a)(3) and a description of the repairs made.

Authority for Requirement: DNR PSD Permit #07-A-560-P  
DNR PSD Permit #07-A-561-P  
DNR PSD Permit #07-A-569-P

SEP-442, SEP-443, SEP-444, SEP-445, SEP-447

G. This emission unit is subject to all applicable recordkeeping, notification, and reporting requirements, as set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15), FFFF (40 CFR §63.2515, 40 CFR §63.2520, and 40 CFR §63.2525), and WW (40 CFR §63.1065 and 40 CFR §63.1066); and NSPS Subparts A (40 CFR §60.1 through 40 CFR §60.19) and Kb (40 CFR §60.115b and 40 CFR §60.116b). Reporting and recordkeeping shall include keeping the following records:

- 1) A record of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored.
- 2) Certification that the internal floating roof meets the specifications of 40 CFR §60.112b(a)(1) and 40 CFR §60.113(a)(1) or 40 CFR §63.1062 and 40 CFR §63.1063.
- 3) A record of each inspection performed. Each record shall identify the storage vessel on which the inspection was performed and shall include the date of the inspection and the observed condition of each component of the control equipment (seals, internal floating roof, etc.). If an inspection finds control equipment defects, the record shall include the reason the tank did not meet the specifications and a description of the repairs made.

Authority for Requirement: DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P  
DNR PSD Permit #07-A-564-P1  
DNR PSD Permit #07-A-565-P1  
DNR PSD Permit #07-A-567-P1

SEP-442, SEP-443

H. The owner or operator of this tank shall follow the testing and observation procedures of 40 CFR §60.113b(a) and repair requirements of 40 CFR §63.1063, as required by the best available control technology (BACT) analysis.

Authority for Requirement: DNR PSD Permit #07-A-562-P  
DNR PSD Permit #07-A-563-P

SEP-444, SEP-445, SEP-447

I. The owner or operator of this tank shall follow the testing and observation procedures of 40 CFR §60.113b(a) and the inspection and repair requirements of 40 CFR §63.1063, as required by the BACT analysis.

Authority for Requirement: DNR PSD Permit #07-A-564-P1  
 DNR PSD Permit #07-A-565-P1  
 DNR PSD Permit #07-A-567-P1

SEP-448

J. This emission unit is subject to all applicable recordkeeping, notification, and reporting requirements, as set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2515, 40 CFR §63.2520, and 40 CFR §63.2525).

Authority for Requirement: DNR PSD Permit #07-A-568-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**Table Dry Mill 36.**

| EP      | LCPH<br>ATI / PTO<br>Numbers | Stack Characteristics                      |                           |                                       |                          |                                   |
|---------|------------------------------|--|---------------------------|---------------------------------------|--------------------------|-----------------------------------|
|         |                              | Stack<br>Height<br>(feet, above<br>ground) | Discharge<br>Style        | Stack<br>Opening<br>(inches,<br>dia.) | Exhaust<br>Temp.<br>(°F) | Exhaust<br>Flow<br>Rate<br>(acfm) |
| SEP-440 | 5217 / 6285                  | 48   | Horizontal                | 10 x 24<br>(4 vents)                  | 90                       | Breathing<br>losses               |
| SEP-441 | 5218 / 6286                  | 48   | Horizontal                | 10 x 24<br>(4 vents)                  | 90                       | Breathing<br>losses               |
| SEP-442 | 5219 / 6287                  | 48   | Horizontal                | 10 x 24<br>(4 vents)                  | 80                       | Breathing<br>losses               |
| SEP-443 | 5220 / 6288                  | 48   | Horizontal                | 10 x 24<br>(4 vents)                  | 80                       | Breathing<br>losses               |
| SEP-444 | 6615 / 6525                  | 48   | Horizontal                | 10 x 24<br>(5 vents)                  | 80                       | Breathing<br>losses               |
| SEP-445 | 6616 / 6526                  | 48   | Horizontal                | 10 x 24<br>(5 vents)                  | 80                       | Breathing<br>losses               |
| SEP-447 | 6617 / 6527                  | 48   | Horizontal                | 10 x 24<br>(4 vents)                  | Ambient                  | Breathing<br>losses               |
| SEP-448 | 5226 / 6289                  | 14   | Vertical,<br>unobstructed | 3                                     | Ambient                  | Breathing<br>losses               |
| SEP-449 | 5227 / 6290                  | 36   | Horizontal                | 10 x 24<br>(4 vents)                  | 170                      | Breathing<br>losses               |

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**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: SEP-450, SEP-451****Process Area: DRY MILL****Table Dry Mill 37. Associated Equipment.**

| EP                 | EU      | EU Description           | Raw Material/<br>Fuel | Rated Capacity | CE               | CE Description                   |
|--------------------|---------|--------------------------|-----------------------|----------------|------------------|----------------------------------|
| SEP-450<br>SEP-451 | EU-450A | Alcohol Loadout Spout #1 | Ethanol               | 60,000 gal/hr  | CE-450<br>CE-451 | Enclosed Flare<br>Enclosed Flare |
| SEP-450<br>SEP-451 | EU-450B | Alcohol Loadout Spout #2 | Ethanol               | 60,000 gal/hr  | CE-450<br>CE-451 | Enclosed Flare<br>Enclosed Flare |
| SEP-450<br>SEP-451 | EU-450C | Alcohol Loadout Spout #3 | Ethanol               | 60,000 gal/hr  | CE-450<br>CE-451 | Enclosed Flare<br>Enclosed Flare |
| SEP-450<br>SEP-451 | EU-450D | Alcohol Loadout Spout #4 | Ethanol               | 60,000 gal/hr  | CE-450<br>CE-451 | Enclosed Flare<br>Enclosed Flare |
| SEP-450<br>SEP-451 | EU-450E | Alcohol Loadout Spout #5 | Ethanol               | 60,000 gal/hr  | CE-450<br>CE-451 | Enclosed Flare<br>Enclosed Flare |
| SEP-450<br>SEP-451 | EU-450F | Alcohol Loadout Spout #6 | Ethanol               | 60,000 gal/hr  | CE-450<br>CE-451 | Enclosed Flare<br>Enclosed Flare |
| SEP-450<br>SEP-451 | EU-450G | Alcohol Loadout Spout #7 | Ethanol               | 60,000 gal/hr  | CE-450<br>CE-451 | Enclosed Flare<br>Enclosed Flare |
| SEP-450<br>SEP-451 | EU-450H | Alcohol Loadout Spout #8 | Ethanol               | 60,000 gal/hr  | CE-450<br>CE-451 | Enclosed Flare<br>Enclosed Flare |

**Applicable Requirements****Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)***The emissions from each emission point shall not exceed the levels specified below.***Table Dry Mill 38. Opacity and Particulate Matter Emission Limits.**

| EP                 | EU                            | Opacity         | PM <sub>10</sub>   | Particulate Matter                                    | Authority for Requirement                                  |
|--------------------|-------------------------------|-----------------|--|---|--|
| SEP-450<br>SEP-451 | EU-450A<br>through<br>EU-450H | 0% <sup>1</sup> | 0.0075 lb/MMBtu <sup>2</sup><br>0.36 tpy <sup>3</sup><br>0.10 lb/hr <sup>2</sup> | 0.0075 lb/MMBtu <sup>2</sup><br>0.36 tpy <sup>3</sup> | DNR PSD Permit #07-A-570-P1<br>DNR PSD Permit #07-A-571-P1 |

**Table Dry Mill 39. Sulfur Dioxide Emission Limits.**

| EP                 | EU                            | SO <sub>2</sub>  | Authority for Requirement                                  |
|--------------------|-------------------------------|--|--|
| SEP-450<br>SEP-451 | EU-450A<br>through<br>EU-450H | 0.0025 lb/MMBtu <sup>2</sup><br>0.07 tpy <sup>3</sup><br>0.10 lb/hr <sup>2</sup> | DNR PSD Permit #07-A-570-P1<br>DNR PSD Permit #07-A-571-P1 |



**Table Dry Mill 40. Nitrogen Oxides and Carbon Monoxide Emission Limits.**

| EP      | EU                 | NO <sub>x</sub>                                    | CO   | Authority for Requirement   |
|---------|--------------------|--|--|-----------------------------|
| SEP-450 | EU-450A            | 4 mg/L <sup>2</sup>                                | 10 mg/L <sup>2</sup>                               | DNR PSD Permit #07-A-570-P1 |
| SEP-451 | through<br>EU-450H | 12.56 tpy <sup>3</sup><br>12.02 lb/hr <sup>2</sup> | 31.39 tpy <sup>3</sup><br>30.01 lb/hr <sup>2</sup> | DNR PSD Permit #07-A-571-P1 |

**Table Dry Mill 41. Other Emission Limits.**

| EP      | EU                 | VOC  | Authority for Requirement   |
|---------|--------------------|--|-----------------------------|
| SEP-450 | EU-450A            | 98% reduction <sup>4</sup> and 10.17         | DNR PSD Permit #07-A-570-P1 |
| SEP-451 | through<br>EU-450H | lb/hr <sup>5</sup><br>10.86 tpy <sup>3</sup> | DNR PSD Permit #07-A-571-P1 |

**Table Dry Mill 42. General Emission Limits.**

| EP      | EU                 | Pollutant       | Emission Limit(s)    | Authority for Requirement          |
|---------|--------------------|-----------------|----------------------|------------------------------------|
| SEP-450 | EU-450A            | Opacity         | 40%                  | 567 IAC 23.3(2)"d"                 |
| SEP-451 | through<br>EU-450H |                 | 20%                  | LCO 10.7                           |
|         |                    | PM              | 0.1 gr/dscf          | 567 IAC 23.3(2)<br>LCO 10.9(1)"a"  |
|         |                    | SO <sub>2</sub> | 500 ppm <sub>v</sub> | 567 IAC 23.3(3)"e"<br>LCO 10.12(2) |

<sup>1</sup> Standard is expressed as a six-minute average.

<sup>2</sup> Standard is expressed as the average of 3 test runs.

<sup>3</sup> Ton per year limits are the sum of emissions from SEP-450 and SEP-451 and correlate to an alcohol loadout limit of 752,325,000 gallons per year total from both emission points.

<sup>4</sup> The percent reduction limit applies across the enclosed flare (CE-450, CE-451).

<sup>5</sup> The pound per hour limit is the limit from the exhaust of the enclosed flare (CE-450, CE-451).

### **Operational Limits & Requirements**

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

#### **Control Device:**

An enclosed flare will be used to reduce volatile organic compound emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: DNR PSD Permit #07-A-570-P1  
DNR PSD Permit #07-A-571-P1

**NSPS and NESHAP Applicability:**

These emission units are subject to Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §60.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF - Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". Not all of the general provisions in Subpart A are applicable to sources subject to the requirements of Subpart FFFF. See Table 12 to Subpart FFFF of 40 CFR §63 for a detailed listing of which general provisions are applicable.

These emission units are subject to Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS) and Subpart VV - Standards of Performance for Equipment Leaks of Volatile Organic Compounds in the Synthetic Organic Chemical Manufacturing Industry.

Authority for Requirement: DNR PSD Permit #07-A-570-P1  
DNR PSD Permit #07-A-571-P1

**Operating Limits:**

- A. The total amount of denatured ethanol loaded out through Alcohol Loadout Spouts #1 through #8, EU-450A through EU-450H, shall not exceed 752,325,000 gallons per 12-month period.
- B. The enclosed flare, CE-451, shall only control loadout vapors from the loading of up to 6,000 gallons per minute of ethanol. If more than 6,000 gallons per minute of ethanol are being loaded at any one time, the additional loadout vapors shall be vented to the second enclosed flare, CE-450.
- C. The facility shall not switch-load (i.e., fill railcars with denatured ethanol when the previous load was gasoline) at Alcohol Loadout Spouts #1 through #8, EU-450A through EU-450H. Only dedicated railcars shall be used for alcohol loadout at this point.
- D. The inflatable hatch seal on the vapor recovery system shall be visually inspected for any defects and to ensure that it is properly seated on the railcar hatch opening prior to each hookup. Inflatable hatch seals that are damaged shall be removed from service until they are repaired or replaced.
- E. The Alcohol Loadout Spouts #1 through #8, EU-450A through EU-450H, shall either be vented through SEP-451 and its accompanying control equipment, or through SEP-450 and its accompanying control equipment, or through a combination of these two emission points. The alcohol loadout spouts shall at no time operate uncontrolled.
- F. The flare shall be designed and operated to meet the minimum requirements of 40 CFR §60.18b through 40 CFR §60.18f.
- G. This emission unit is subject to all applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 through 40 CFR §60.19) and VV (40 CFR §60.480 through 40 CFR §60.489).
- H. This emission unit is subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2430 through 40 CFR §63.2550). Specifically, the facility shall comply with all applicable requirements for each transfer rack according to the provisions in 40 CFR §63.2475.
- I. The auxiliary fuel used in the flare is limited to natural gas, biogas, or propane.

- J. The owner or operator shall maintain the control equipment according to manufacturer's specifications and maintenance schedule.

Authority for Requirement: DNR PSD Permit #07-A-570-P1  
 DNR PSD Permit #07-A-571-P1

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. Record monthly, the total amount of denatured ethanol loaded out through these emission units each month in gallons. Calculate and record 12-month rolling totals.
- B. For each loading event, continuously record the gallons per minute of ethanol loaded and how many gallons per minute of ethanol was vented to each emission point.
- C. The owner or operator shall monitor the presence of the pilot flame and other parameters of the flare, according to the provisions of 40 CFR §60.18.
- D. The owner or operator shall follow the applicable recordkeeping and reporting standards of NSPS Subpart VV (40 CFR §60.486 and 40 CFR §60.487).
- E. This emission unit is subject to all applicable recordkeeping, notification, and reporting requirements, as set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2515, 40 CFR §63.2520, and 40 CFR §63.2525).
- F. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the monitoring device.

Authority for Requirement: DNR PSD Permit #07-A-570-P1  
 DNR PSD Permit #07-A-571-P1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**Table Dry Mill 43.**

| EP      | LCPH<br>ATI / PTO<br>Numbers | Stack Characteristics                      |                           |                                       |                          |                                   |
|---------|------------------------------|--|---------------------------|---------------------------------------|--------------------------|-----------------------------------|
|         |                              | Stack<br>Height<br>(feet, above<br>ground) | Discharge<br>Style        | Stack<br>Opening<br>(inches,<br>dia.) | Exhaust<br>Temp.<br>(°F) | Exhaust<br>Flow<br>Rate<br>(scfm) |
| SEP-450 | 5228 / 6308                  | 30   | Vertical,<br>unobstructed | 96                                    | 1,800                    | 12,500                            |
| SEP-451 | 5229 / 6309                  | 30   | Vertical,<br>unobstructed | 96                                    | 1,800                    | 12,500                            |

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes <sup>1</sup> No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

<sup>1</sup> Facility maintained operation and maintenance plan is required for CO for SEP-051 only.

*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: SEP-452, SEP-453, SEP-454, SEP-455, SEP-457**  
**Process Area: DRY MILL**

**Table Dry Mill 44. Associated Equipment.**

| EP      | EU     | EU Description         | Raw Material /Fuel | Rated Capacity | CE   | CE Description |
|---------|--------|------------------------|--------------------|----------------|------|----------------|
| SEP-452 | EU-452 | Fire Pump Engine #1    | Diesel             | 540-hp         | None | None           |
| SEP-453 | EU-453 | Fire Pump Engine #2    | Diesel             | 540-hp         | None | None           |
| SEP-454 | EU-454 | Fire Pump Engine #3    | Diesel             | 540-hp         | None | None           |
| SEP-455 | EU-455 | Fire Pump Engine #4    | Diesel             | 540-hp         | None | None           |
| SEP-457 | EU-457 | Emergency Generator #2 | Diesel             | 1,500 kW       | None | None           |

**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.*

**Table Dry Mill 45. Opacity and Particulate Matter Emission Limits.**

| EP      | EU     | Opacity         | PM <sub>10</sub>   | Particulate Matter                                  | Authority for Requirement  |
|---------|--------|-----------------|--|---|----------------------------|
| SEP-452 | EU-452 | 5% <sup>1</sup> | 0.15 g/bhp-hr <sup>2</sup><br>0.04 tpy <sup>3</sup><br>0.18 lb/hr <sup>2,4</sup> | 0.15 g/bhp-hr <sup>2</sup><br>0.04 tpy <sup>3</sup> | DNR PSD Permit #07-A-572-P |
| SEP-453 | EU-453 |                 |  |   | DNR PSD Permit #07-A-573-P |
| SEP-454 | EU-454 |                 |  |   | DNR PSD Permit #07-A-574-P |
| SEP-455 | EU-455 |                 |  |   | DNR PSD Permit #07-A-575-P |
|         |        |                 |  | 0.15 g/bhp-hr <sup>2</sup><br>(filterable only)     | 40 CFR §60.4200            |
| SEP-457 | EU-457 | 5% <sup>1</sup> | 0.15 g/bhp-hr <sup>2</sup><br>0.17 tpy <sup>3</sup><br>0.67 lb/hr <sup>2,4</sup> | 0.15 g/bhp-hr <sup>2</sup><br>0.17 tpy <sup>3</sup> | DNR PSD Permit #07-A-577-P |
|         |        |                 |  |   |                            |

**Table Dry Mill 46. Sulfur Dioxide Emission Limits.**

| EP      | EU     | SO <sub>2</sub>  | Authority for Requirement  |
|---------|--------|--|----------------------------|
| SEP-452 | EU-452 | 0.17 g/bhp-hr <sup>2,5</sup><br>0.05 tpy <sup>3</sup><br>0.20 lb/hr <sup>2,4</sup> | DNR PSD Permit #07-A-572-P |
| SEP-453 | EU-453 |  | DNR PSD Permit #07-A-573-P |
| SEP-454 | EU-454 |  | DNR PSD Permit #07-A-574-P |
| SEP-455 | EU-455 |  | DNR PSD Permit #07-A-575-P |
| SEP-457 | EU-457 | 0.17 g/bhp-hr <sup>2,5</sup><br>0.18 tpy <sup>3</sup><br>0.73 lb/hr <sup>2,4</sup> | DNR PSD Permit #07-A-577-P |

**Table Dry Mill 47. Nitrogen Oxides and Carbon Monoxide Emission Limits.**

| EP      | EU     | NO <sub>x</sub>  | CO   | Authority for Requirement  |
|---------|--------|--|--|----------------------------|
| SEP-452 | EU-452 | 2.8 g/bhp-hr <sup>2</sup>  | 2.6 g/bhp-hr <sup>2</sup>  | DNR PSD Permit #07-A-572-P |
| SEP-453 | EU-453 | 0.83 tpy <sup>3</sup>  | 0.78 tpy <sup>3</sup>  | DNR PSD Permit #07-A-573-P |
| SEP-454 | EU-454 | 3.33 lb/hr <sup>2,4</sup>  | 3.10 lb/hr <sup>2,4</sup>  | DNR PSD Permit #07-A-574-P |
| SEP-455 | EU-455 |  |  | DNR PSD Permit #07-A-575-P |
| SEP-457 | EU-457 | 4.5 g/bhp-hr <sup>2</sup><br>5.29 tpy <sup>3</sup><br>21.17 lb/hr <sup>2,4</sup> | 2.6 g/bhp-hr <sup>2</sup><br>2.88 tpy <sup>3</sup><br>11.53 lb/hr <sup>2,4</sup> | DNR PSD Permit #07-A-577-P |

**Table Dry Mill 48. Other Emission Limits.**

| EP      | EU     | Pollutant                           | Emission Limit(s)                                  | Authority for Requirement  |
|---------|--------|-------------------------------------|--|----------------------------|
| SEP-452 | EU-452 | VOC                                 | 0.2 g/bhp-hr <sup>2</sup>                          | DNR PSD Permit #07-A-572-P |
| SEP-453 | 452    |                                     | 0.06 tpy <sup>3</sup>                              | DNR PSD Permit #07-A-573-P |
| SEP-454 | EU-453 |                                     | DNR PSD Permit #07-A-574-P                         |                            |
| SEP-455 | 453    |                                     | DNR PSD Permit #07-A-575-P                         |                            |
|         | EU-454 | NO <sub>x</sub> + NMHC <sup>6</sup> | 3.0 g/bhp-hr <sup>2</sup>                          | 40 CFR §60.4200            |
|         | EU-455 |                                     |  |                            |
| SEP-457 | EU-457 | VOC                                 | 0.3 g/bhp-hr <sup>2</sup><br>0.33 tpy <sup>3</sup> | DNR PSD Permit #07-A-577-P |
|         |        | NO <sub>x</sub> + NMHC <sup>6</sup> | 4.8 g/bhp-hr <sup>2</sup>                          | 40 CFR §60.4200            |

**Table Dry Mill 49. Fuel Sulfur Requirements (beginning October 1, 2007).**

| EP      | EU     | Fuel Sulfur Requirements  | Authority for Requirement |
|---------|--------|---|---------------------------|
| SEP-452 | EU-452 | Max 500 ppm Sulfur and<br>Min Cetane Index = 40 or<br>Max Aromatic Content = 35% <sub>vol</sub> | 40 CFR §80.510(a)         |
| SEP-453 | EU-453 |   |                           |
| SEP-454 | EU-454 |   |                           |
| SEP-455 | EU-455 |   |                           |
| SEP-457 | EU-457 |   |                           |

**Table Dry Mill 50. Fuel Sulfur Requirements (beginning October 1, 2010).**

| EP      | EU     | Fuel Sulfur Requirements   | Authority for Requirement |
|---------|--------|--|---------------------------|
| SEP-452 | EU-452 | Max 15 ppm Sulfur and<br>Min Cetane Index = 40 or<br>Max Aromatic Content = 35% <sub>vol</sub> | 40 CFR §80.510(b)         |
| SEP-453 | EU-453 |  |                           |
| SEP-454 | EU-454 |  |                           |
| SEP-455 | EU-455 |  |                           |
| SEP-457 | EU-457 |  |                           |

**Table Dry Mill 51. General Emission Limits.**

| EP      | EU     | Pollutant       | Emission Limit(s) | Authority for Requirement |
|---------|--------|-----------------|-------------------|---------------------------|
| SEP-452 | EU-452 | Opacity         | 40%               | 567 IAC 23.3(2)"d"        |
| SEP-453 | EU-453 |                 | 20%               | LCO 10.7                  |
| SEP-454 | EU-454 | SO <sub>2</sub> | 2.5 lb/MMBtu      | 567 IAC 23.3(3)"b"(2)     |
| SEP-455 | EU-455 |                 | 1.5 lb/MMBtu      | LCO 10.12(1)"b"           |
| SEP-457 | EU-457 |                 |                   |                           |

<sup>1</sup> Standard is expressed as a six-minute average and applies only during normal operation. A standard of 20% opacity applies during times of startup, shutdown, and malfunction.

<sup>2</sup> Standard is expressed as the average of 3 test runs.

<sup>3</sup> Ton per year limits correlate to an operating limit of 500 hours per year.

<sup>4</sup> The limit for PM<sub>10</sub> emissions is established to limit emissions below levels that predict exceedances of the 24-hour NAAQS for PM<sub>10</sub>. The limit for SO<sub>2</sub> emissions is established to limit emissions below levels that predict exceedances of the 3-hour, 24-hour, and annual NAAQS for SO<sub>2</sub>. The limit for NO<sub>x</sub> emissions is established to limit emissions below levels that predict exceedances of the annual NAAQS for NO<sub>x</sub>. The limit for CO emissions is established to limit emissions below levels that predict exceedances of the 1-hour and 8-hour NAAQS for CO.

<sup>5</sup> Standard corresponds to the use of diesel fuel containing no more than 0.05% sulfur, by weight.

<sup>6</sup> Nitrogen Oxides (NO<sub>x</sub>) + Non-Methane Hydrocarbons (NMHC)

### **Operational Limits & Requirements**

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

#### **NSPS and NESHAP Applicability:**

This emission unit is subject to the New Source Performance Standards (NSPS) Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR §60.4200 through 40 CFR §60.4219) and to NSPS Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) and is also subject to the requirements of 567 IAC 23.1(2)"yyy".

This emission unit is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines (40 CFR §63.6580 through 40 CFR §63.6675) and to NESHAP Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15) and is also subject to the requirements of 567 IAC 23.1(4)"cz".

This generator is considered an Emergency Stationary Reciprocating Internal Combustion Engine (RICE) and is only subject to the initial notification requirements of 40 CFR §63.6645(c). By NESHAP definition, Emergency Stationary RICE may operate only 50 hours per year in non-emergency situations.

Failure to include any NSPS or NESHAP requirements as a part of this permit does not relieve the permittee from the requirement to comply with all applicable NSPS or NESHAP requirements.

Authority for Requirement: DNR PSD Permit #07-A-572-P  
DNR PSD Permit #07-A-573-P  
DNR PSD Permit #07-A-574-P  
DNR PSD Permit #07-A-575-P  
DNR PSD Permit #07-A-577-P

#### **Operating Limits:**

- A. Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457) shall operate only in emergency situations or for routine maintenance and testing.
- B. Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457) shall not operate more than 500 hours per rolling 12-month period.

- C. Per 40 CFR §60.4211, emergency stationary internal combustion engine (ICE) may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine for a maximum of 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
- D. Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457) shall be limited to using diesel fuel with a maximum sulfur content not to exceed 0.05% by weight.
- E. Beginning October 1, 2007, diesel fuel fired in Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457) shall be limited to a maximum sulfur content of 500 ppm and a minimum cetane index of 40 or a maximum aromatic content of 30%, by volume, per 40 CFR §80.510(a).
- F. Beginning October 1, 2010, diesel fuel fired in Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457) shall be limited to a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 30%, by volume, per 40 CFR §80.510(b).
- G. Per 40 CFR §60.4207, owners and operators of pre-2011 model year diesel generators subject to NSPS Subpart IIII (40 CFR §60.4200 through 40 CFR §60.4219) may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of 40 CFR §80.510(a) or 40 CFR §80.510(b) beyond the dates required, for the purpose of using up existing fuel inventories.

Authority for Requirement: DNR PSD Permit #07-A-572-P  
 DNR PSD Permit #07-A-573-P  
 DNR PSD Permit #07-A-574-P  
 DNR PSD Permit #07-A-575-P  
 DNR PSD Permit #07-A-577-P

**Operating Condition Monitoring**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator of Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457) shall install a non-resettable hour meter prior to startup of the engine, per 40 CFR §60.4209.
- B. Record each month the total hours of operation for Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4



(SEP-455), and Emergency Generator #2 (SEP-457) and the reason the Fire Pump was operated. Calculate and record rolling 12-month totals.

- C. Maintain records of the sulfur content of the fuel oil utilized in Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457).
- D. The owner or operator of Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457) shall follow the monitoring requirements of 40 CFR §60.4209.
- E. The owner or operator of Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457) shall follow the compliance requirements of 40 CFR §60.4211.
- F. The owner or operator of Fire Pump Engine #1 (SEP-452), Fire Pump Engine #2 (SEP-453), Fire Pump Engine #3 (SEP-454), Fire Pump Engine #4 (SEP-455), and Emergency Generator #2 (SEP-457) shall follow the notification, reporting, and recordkeeping requirements of 40 CFR §60.4214(b).

Authority for Requirement: DNR PSD Permit #07-A-572-P  
 DNR PSD Permit #07-A-573-P  
 DNR PSD Permit #07-A-574-P  
 DNR PSD Permit #07-A-575-P  
 DNR PSD Permit #07-A-577-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**Table Dry Mill 52.**

| EP      | LCPH<br>ATI / PTO<br>Numbers | Stack Characteristics                      |                           |                                       |                          |                                   |
|---------|------------------------------|--|---------------------------|---------------------------------------|--------------------------|-----------------------------------|
|         |                              | Stack<br>Height<br>(feet, above<br>ground) | Discharge<br>Style        | Stack<br>Opening<br>(inches,<br>dia.) | Exhaust<br>Temp.<br>(°F) | Exhaust<br>Flow<br>Rate<br>(scfm) |
| SEP-452 | 5230 / 6291                  | 25   | Vertical,<br>unobstructed | 10                                    | 955                      | 1,460                             |
| SEP-453 | 5236 / 6292                  | 25   | Vertical,<br>unobstructed | 10                                    | 955                      | 1,460                             |
| SEP-454 | 5237 / 6293                  | 25   | Vertical,<br>unobstructed | 10                                    | 955                      | 1,460                             |
| SEP-455 | 5231 / 6294                  | 25   | Vertical,<br>unobstructed | 10                                    | 955                      | 1,460                             |
| SEP-457 | 5233 / 6295                  | 45   | Vertical,<br>unobstructed | 12                                    | 764                      | 4,790                             |

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**Opacity Monitoring:**

Opacity monitoring is not required at this time.

**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)

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**Emission Point ID Number: SEP-478****Table Dry Mill 53. Associated Equipment.**

| EP      | EU      | EU Description                          | Raw Material/Fuel | Rated Capacity | CE     | CE Description |
|---------|---------|---|-------------------|----------------|--------|----------------|
| SEP-478 | EU-478  | DDGS Flat Storage Ventilation           | DDGS              | 400 ton/hr     | CE-478 | Baghouse       |
| SEP-478 | EU-478A | DDGS Rail Loading Shuttle Drag Conveyor | DDGS              | 400 ton/hr     | CE-478 | Baghouse       |

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**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.*

**Table Dry Mill 54. Opacity and Particulate Matter Emission Limits.**

| EP      | EU                | PM <sub>10</sub>           | Authority for Requirement |
|---------|-------------------|----------------------------|---------------------------|
| SEP-478 | EU-478<br>EU-478A | 1.714 lb/hr <sup>1,2</sup> | LCPH ATI 6734 / PTO 6601  |

**Table Dry Mill 55. Other Emission Limits.**

| EP      | EU      | Pollutant    | Emission Limit(s)       | Authority for Requirement |
|---------|---------|--------------|-------------------------|---------------------------|
| SEP-478 | EU-478A | VOC          | 3.58 lb/hr <sup>1</sup> | LCPH ATI 6734 / PTO 6601  |
|         |         | Acetaldehyde | 0.83 lb/hr <sup>1</sup> | LCPH ATI 6734 / PTO 6601  |
|         |         | Acrolein     | 0.62 lb/hr <sup>1</sup> | LCPH ATI 6734 / PTO 6601  |
|         |         | Formaldehyde | 0.59 lb/hr <sup>1</sup> | LCPH ATI 6734 / PTO 6601  |
|         |         | Methanol     | 0.60 lb/hr <sup>1</sup> | LCPH ATI 6734 / PTO 6601  |
|         |         | Total HAP    | 1.73 lb/hr <sup>1</sup> | LCPH ATI 6734 / PTO 6601  |

**Table Dry Mill 56. General Emission Limits.**

| EP      | EU                | Pollutant | Emission Limit(s)  | Authority for Requirement         |
|---------|-------------------|-----------|--------------------|-----------------------------------|
| SEP-478 | EU-478<br>EU-478A | Opacity   | 20% <sup>3,4</sup> | LCO 10.7                          |
|         |                   | PM        | 0.1 gr/dscf        | 567 IAC 23.3(2)<br>LCO 10.9(1)"a" |

<sup>1</sup> Standard is expressed as the average of 3 runs.

<sup>2</sup> Emission rate used to demonstrate no exceedance of the National Ambient Air Quality Standards (NAAQS).

<sup>3</sup> The emission limit is a six (6) minute average.

<sup>4</sup> The observation of visible emissions of air contaminants, as defined in LCO 10.2, will require the owner/operator to promptly investigate the emission unit and make corrections to operations

or equipment associated with the visible emissions. If visible emissions continue after the corrections, Linn County may require additional proof to demonstrate compliance (e.g., stack testing).

**Operational Limits & Requirements**

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

**Control Device:**

A baghouse will be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: LCPH ATI 6734 / PTO 6601

**Operating Limits:**

- A. The control equipment shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be 0.5 inches of water column to 8 inches of water column.

Authority for Requirement: LCPH ATI 6734 / PTO 6601

**Operating Condition Monitoring and 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall monitor and record 'no visible emissions' observation on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.
- B. Record all maintenance and repair completed on the control device.
- C. Monitor and record differential pressure across the baghouse on a weekly basis.

Authority for Requirement: LCPH ATI 6734 / PTO 6601

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 140

Discharge Style: Vertical, unobstructed

Stack Opening, (diameter, inches): 52

Exhaust Temperature (°F): Ambient

Exhaust Flow Rate (acfm): 50,000

Authority for Requirement: LCPH ATI 6734 / PTO 6601

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

The following stack testing shall be performed:

**Table Dry Mill 57. Required Stack Testing.**

| <b>Pollutant</b> | <b>1st Stack Test to be Completed by</b>           | <b>Test Method</b>   |
|------------------|--|--|
| PM               | Within first two years of permit term <sup>1</sup> | 40 CFR 60, Appendix A, Method 5<br>40 CFR 51, Appendix M, Method 202 |
| PM <sub>10</sub> | Within first two years of permit term <sup>1</sup> | 40 CFR 51, Appendix M, Methods 201A w/ 202                           |
| HAP              | Within first two years of permit term              | 40 CFR 60, Appendix A, Method 18                                     |

<sup>1</sup> Testing was completed on December 1, 2015 for PM and PM<sub>10</sub>. The results were submitted to LCPH on January 19, 2016 and are currently pending review. The results from this test will be considered sufficient to meet the testing requirement above, so long as the results meet the established emission limits. If the results show an exceedance, additional stack testing will be required.

Authority for Requirement: 567 IAC 22.108(3)

**Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes <sup>1</sup> No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No

<sup>1</sup> Facility maintenance operation and maintenance plan is required for PM.

*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)

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**Emission Point ID Number: SEP-479****Table Dry Mill 58. Associated Equipment.**

| EP      | EU     | EU Description             | Raw Material /Fuel | Rated Capacity | CE   | CE Description |
|---------|--------|----------------------------|--------------------|----------------|------|----------------|
| SEP-479 | EU-479 | Sulfuric Acid Storage Tank | Sulfuric Acid      | 43,620 gallons | None | None           |

---

**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.*

**Table Dry Mill 59. Opacity and Particulate Matter Emission Limits.**

| EP      | EU     | Opacity         | PM <sub>10</sub>                    | Authority for Requirement  |
|---------|--------|-----------------|-------------------------------------|----------------------------|
| SEP-479 | EU-479 | 0% <sup>1</sup> | Work Practice Standard <sup>2</sup> | DNR PSD Permit #07-A-582-P |

**Table Dry Mill 60. General Emission Limits.**

| EP      | EU     | Pollutant | Emission Limit(s)        | Authority for Requirement         |
|---------|--------|-----------|--------------------------|-----------------------------------|
| SEP-479 | EU-479 | Opacity   | 40%                      | 567 IAC 23.3(2)"d"                |
|         |        |           | 20%                      | LCO 10.7                          |
|         |        | PM        | 0.1 gr/dscf <sup>2</sup> | 567 IAC 23.3(2)<br>LCO 10.9(1)"a" |

<sup>1</sup> Standard is expressed as a six-minute average.

<sup>2</sup> BACT limits for PM and PM<sub>10</sub> is expressed in the form of a work practice standard, as opposed to an emission limit. See 'Operating Limits' for work practice requirements.

**Operational Limits & Requirements**

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

**Operating Limits:**

- A. The owner or operator shall fill, operate, and maintain the Sulfuric Acid Storage Tank in a manner to minimize sulfuric acid emissions. At a minimum, the owner or operator shall fill the tank using submerged loading.

Authority for Requirement: DNR PSD Permit #07-A-582-P

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall maintain a record of all actions taken to minimize emissions of sulfuric acid from the Sulfuric Acid Storage Tank.

Authority for Requirement: DNR PSD Permit #07-A-582-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 2
- Discharge Style: Horizontal
- Stack Opening, (diameter, inches): 3
- Exhaust Temperature (°F): 68
- Exhaust Flow Rate (scfm): 100
- Authority for Requirement: DNR PSD Permit #07-A-582-P

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**Opacity Monitoring:**

Opacity monitoring is not required at this time.

**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)



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**Emission Point ID Number: SEP-480****Table Dry Mill 61. Associated Equipment.**

| EP      | EU     | EU Description                         | Raw Material/Fuel | Rated Capacity          | CE   | CE Description |
|---------|--------|--|-------------------|-------------------------|------|----------------|
| SEP-480 | EU-480 | Flat Feed Storage and Reclaim Building | DDGS              | 700,000 ft <sup>3</sup> | None | None           |

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**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.*

**Table Dry Mill 62. Opacity and Particulate Matter Emission Limits.**

| EP      | EU     | Opacity              | PM-10                               | Authority for Requirement  |
|---------|--------|----------------------|-------------------------------------|----------------------------|
| SEP-480 | EU-480 | No Visible Emissions | Work Practice Standard <sup>1</sup> | DNR PSD Permit #07-A-583-P |

**Table Dry Mill 63. General Emission Limits.**

| EP      | EU     | Pollutant | Emission Limit(s)        | Authority for Requirement         |
|---------|--------|-----------|--------------------------|-----------------------------------|
| SEP-480 | EU-480 | Opacity   | 40%                      | 567 IAC 23.3(2)"d"                |
|         |        |           | 20%                      | LCO 10.7                          |
|         |        | PM        | 0.1 gr/dscf <sup>1</sup> | 567 IAC 23.3(2)<br>LCO 10.9(1)"a" |

<sup>1</sup> BACT limits for PM and PM<sub>10</sub> is expressed in the form of a work practice standard, as opposed to an emission limit. See 'Operating Limits' for work practice requirements.

**Operational Limits & Requirements**

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

**Operating Limits:**

- A. The owner or operator shall operate and maintain the Flat Feed Storage and Reclaim Building in a manner to minimize particulate emissions. At a minimum, this shall include keeping all doors and windows closed while material is being transferred or stored within the building.

Authority for Requirement: DNR PSD Permit #07-A-583-P

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall maintain a record of all actions taken to minimize emissions of particulate matter from the Flat Feed Storage and Reclaim Building.

- B. The owner or operator shall observe the Flat Feed Storage and Reclaim Building at least once per day from all four sides of the building to ensure there are no visible emissions from operations occurring within the building.

Authority for Requirement: DNR PSD Permit #07-A-583-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

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

Discharge Style: NA

Stack Opening, (diameter, inches): NA

Exhaust Temperature (°F): Ambient

Exhaust Flow Rate (acfm): NA

Authority for Requirement: DNR PSD Permit #07-A-583-P

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**Opacity Monitoring:**

The facility shall check the opacity daily during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

**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)

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**Emission Point ID Number: SEP-481, SEP-482, SEP-497**
**Table Dry Mill 64. Associated Equipment.**

| <b>EP</b> | <b>EU</b> | <b>EU Description</b>                       | <b>Raw Material /Fuel</b> | <b>Rated Capacity</b>   | <b>CE</b> | <b>CE Description</b> |
|-----------|-----------|---|---------------------------|-------------------------|-----------|-----------------------|
| SEP-481   | EU-481G   | DDGS Feed Elevator 2                        | DDGS                      | 200 ton/hr              | CE-481    | Baghouse              |
| SEP-481   | EU-481H   | DDGS Flat Storage Reclaim L Path Conveyor   | DDGS                      | 200 ton/hr              | CE-481    | Baghouse              |
| SEP-481   | EU-481I   | DDGS Bulkweigher Feed Elevator 2            | DDGS                      | 200 ton/hr              | CE-481    | Baghouse              |
| SEP-481   | EU-481J   | DDGS Truck Loading Shuttling Drag Conveyor  | DDGS                      | 400 ton/hr              | CE-481    | Baghouse              |
| SEP-482   | EU-482    | Dry Feed Storage Silo #1                    | DDGS                      | 215,400 ft <sup>3</sup> | CE-482    | Baghouse              |
| SEP-497   | EU-497A   | Cooled DDGS Belt Conveyor #1                | DDGS                      | 175 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497B   | DDGS Incline Drag Conveyor #1               | DDGS                      | 175 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497C   | DDGS Flat Storage Piling Drag Conveyor      | DDGS                      | 175 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497D   | DDGS Silo #1 Recirculation Drag Conveyor    | DDGS                      | 175 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497E   | DDGS Silo #1 Laidig Conveyor                | DDGS                      | 400 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497I   | DDGS Bulkweigher Feed Elevator              | DDGS                      | 400 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497J   | DDGS Silo Feed Elevator                     | DDGS                      | 175 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497K   | DDGS Bulkweigh Scale #1                     | DDGS                      | 400 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497L   | DDGS Bulkweigh Scale #2                     | DDGS                      | 400 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497M   | DDGS Bulkweigher Discharge Drag Conveyor #1 | DDGS                      | 400 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497N   | DDGS Bulkweigher Discharge Drag Conveyor #2 | DDGS                      | 400 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497O   | DDGS Silo #1 Laidig Conveyor                | DDGS                      | 400 ton/hr              | CE-497    | Baghouse              |
| SEP-497   | EU-497P   | DDGS Silo #1 Reclaim Drag Conveyor          | DDGS                      | 400 ton/hr              | CE-497    | Baghouse              |

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## Applicable Requirements

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

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

**Table Dry Mill 65. Opacity and Particulate Matter Emission Limits.**

| EP      | EU                                       | Opacity         | PM <sub>10</sub>                                       | Particulate Matter         | Authority for Requirement      |
|---------|--|-----------------|--|----------------------------|--------------------------------|
| SEP-481 | EU-481G<br>EU-481H<br>EU-481I<br>EU-481J | 0% <sup>1</sup> | 0.004 gr/dscf <sup>2</sup><br>0.686 lb/hr <sup>2</sup> | 0.004 gr/dscf <sup>2</sup> | DNR PSD Permit<br>#07-A-584-P2 |
| SEP-482 | EU-482                                   | 0% <sup>1</sup> | 0.004 gr/dscf <sup>2</sup><br>0.09 lb/hr <sup>2</sup>  | 0.004 gr/dscf <sup>2</sup> | DNR PSD Permit<br>#07-A-585-P1 |
| SEP-497 | EU-497A<br>through<br>EU-497P            | 0% <sup>1</sup> | 0.004 gr/dscf <sup>2</sup><br>0.27 lb/hr <sup>2</sup>  | 0.004 gr/dscf <sup>2</sup> | DNR PSD Permit<br>#07-A-590-P2 |

**Table Dry Mill 66. Other Emission Limits.**

| Pollutant                 | SEP-481  | SEP-482  | SEP-497  |
|---------------------------|--|--|--|
| VOC                       | 20 ppm <sub>vd</sub> <sup>3</sup> and<br>2.86 lb/hr <sup>4</sup> | 20 ppm <sub>vd</sub> <sup>3</sup> and<br>0.47 lb/hr <sup>4</sup> | 20 ppm <sub>vd</sub> <sup>4</sup> and<br>1.15 lb/hr <sup>4</sup> |
| Acetaldehyde              | 0.33 lb/hr <sup>2</sup>  | 0.02 lb/hr <sup>2</sup>  | 0.13 lb/hr <sup>2</sup>  |
| Acrolein                  | 0.25 lb/hr <sup>2</sup>  | 0.02 lb/hr <sup>2</sup>  | 0.10 lb/hr <sup>2</sup>  |
| Formaldehyde              | 0.24 lb/hr <sup>2</sup>  | 0.02 lb/hr <sup>2</sup>  | 0.09 lb/hr <sup>2</sup>  |
| Methanol                  | 0.24 lb/hr <sup>2</sup>  | 0.02 lb/hr <sup>2</sup>  | 0.10 lb/hr <sup>2</sup>  |
| Total HAP                 | 0.70 lb/hr <sup>2</sup>  | 0.04 lb/hr <sup>2</sup>  | 0.28 lb/hr <sup>2</sup>  |
| Authority for Requirement | DNR PSD Permit<br>#07-A-584-P2                                   | DNR PSD Permit<br>#07-A-585-P1                                   | DNR PSD Permit<br>#07-A-590-P2                                   |

**Table Dry Mill 67. General Emission Limits.**

| EP      | EU      | Pollutant | Emission Limit(s)        | Authority for Requirement         |
|---------|---------|-----------|--------------------------|-----------------------------------|
| SEP-481 | All EUs | Opacity   | 40%                      | 567 IAC 23.3(2)"d"                |
| SEP-482 |         |           | 20%                      | LCO 10.7                          |
| SEP-497 |         | PM        | 0.1 gr/dscf <sup>1</sup> | 567 IAC 23.4(7)<br>LCO 10.9(1)"g" |

<sup>1</sup> The emission limit is a six (6) minute average.

<sup>2</sup> The emission limit is expressed as the average of three (3) runs.

<sup>3</sup> Concentration standard is expressed as VOC as ethanol.

<sup>4</sup> Pound per hour standard is expressed as the total of individual VOC compounds.

### Operational Limits & Requirements

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

#### **Control Device:**

A baghouse will be used to reduce particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in

'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: DNR PSD Permit #07-A-584-P2  
DNR PSD Permit #07-A-585-P1  
DNR PSD Permit #07-A-590-P2

**Operating Limits:**

- A. The owner or operator shall furnish the Department with final detailed plans and specifications for all emission control equipment selected by the owner to meet the emission limits contained in **Tables Dry Mill 65, 66, and 67**. In addition, the facility shall detail all revisions made to the affected emission units. This information shall be submitted to the Department at least 30 days in advance of construction of any control equipment.
- B. The baghouse (CE-481, CE-482, CE-497) pressure drop shall be maintained within the operating range specified by the manufacturer.

Authority for Requirement: DNR PSD Permit #07-A-584-P2  
DNR PSD Permit #07-A-585-P1  
DNR PSD Permit #07-A-590-P2

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall properly operate and maintain equipment to continuously monitor the baghouse pressure drop. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, or per written facility-specific operation and maintenance plan.
- B. The owner or operator shall collect and record the differential pressure, in inches of water column, on a continuous basis. The requirement shall not apply on the days that the baghouse or the equipment that the baghouse controls is not in operation.
- C. The owner and operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment and the monitoring devices.
- D. The owner or operator shall maintain a record of the range of baghouse pressure drop observed during the last successful compliance test for reference.

Authority for Requirement: DNR PSD Permit #07-A-584-P2  
DNR PSD Permit #07-A-585-P1  
DNR PSD Permit #07-A-590-P2

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**Table Dry Mill 68.**

| <b>EP</b> | <b>LCPH<br/>ATI / PTO<br/>Numbers</b> | <b>Stack Characteristics</b>                         |                            |   |                                   |   |
|-----------|---------------------------------------|--|----------------------------|---|-----------------------------------|---|
|           |                                       | <b>Stack<br/>Height<br/>(feet, above<br/>ground)</b> | <b>Discharge<br/>Style</b> | <b>Stack<br/>Opening<br/>(inches,<br/>dia.)</b> | <b>Exhaust<br/>Temp.<br/>(°F)</b> | <b>Exhaust<br/>Flow<br/>Rate<br/>(acfm)</b> |
| SEP-481   | 6736 / 6609                           | 140  | Vertical,<br>unobstructed  | 32  | 75                                | 20,000                                      |
| SEP-482   | 5244 / 6297                           | 120  | Vertical,<br>unobstructed  | 8   | 75                                | 1,000                                       |
| SEP-497   | 6735 / 6610                           | 53   | Vertical,<br>unobstructed  | 20  | 70                                | 8,000                                       |

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

### **Monitoring Requirements**

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

#### **Stack Testing:**

The following stack tests shall be performed on SEP-481 only:

Pollutant – Particulate Matter (PM)

1<sup>st</sup> Stack Test to be Completed by – within first two years of permit term

Test Method – Method 5 (40 CFR Part 60, Appendix A) and  
Method 202 (40 CFR Part 51, Appendix M)

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Volatile Organic Compounds (VOC)

1<sup>st</sup> Stack Test to be Completed by – within first two years of permit term

Test Method – Method 25A (40 CFR Part 60, Appendix A)

Authority for Requirement – 567 IAC 22.108(3)

#### **Opacity Monitoring:**

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed, corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If corrective action does not return the observation to 'no visible emissions,' then a Method 9 observation will be required.

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for requirement: 567 IAC 22.108(14)

**Agency Approved Operation & Maintenance Plan Required?** Yes  No

**Facility Maintained Operation & Maintenance Plan Required?** Yes  No

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes  No <sup>1</sup>

<sup>1</sup> CAM has been waived. DNR PSD Permits #07-A-584-P2 and #07-A-590-P2 have CAM equivalent monitoring and recordkeeping required.

Authority for Requirement: 567 IAC 22.108(3)



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**Emission Point ID Number: SEP-485****Table Dry Mill 69. Associated Equipment.**

| EP      | EU     | EU Description                            | Raw Material/Fuel | Rated Capacity | CE   | CE Description |
|---------|--------|---|-------------------|----------------|------|----------------|
| SEP-485 | EU-485 | 30% Condensed Distillers Solubles Loadout | 30% CDS           | 30,000 gallons | None | None           |

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**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.*

**Table Dry Mill 70. Emission Limits.**

| EP      | EU     | VOC                                | Authority for Requirement  |
|---------|--------|------------------------------------|----------------------------|
| SEP-485 | EU-485 | 0.0025 tpy, 12-month rolling total | DNR PSD Permit #07-A-588-P |

**Operational Limits & Requirements**

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

**Operating Limits:**

- A. The 30% CDS Loadout shall not load out more than 7,300,000 gallons of 30% condensed distillers solubles per 12-month rolling period.
- B. Only 30% condensed distillers solubles may be loaded out from this emission unit.
- C. The owner or operator shall fill and operate the 30% CDS Loadout in a manner to minimize VOC emissions.

Authority for Requirement: DNR PSD Permit #07-A-588-P

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. Record monthly, the total amount of 30% condensed distillers solubles loaded out through this emission unit each month in gallons. Calculate and record the 12-month rolling totals.
- B. The owner or operator shall maintain a record of all actions taken to minimize emissions of VOC from the 30% CDS Loadout.

Authority for Requirement: DNR PSD Permit #07-A-588-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 15  
Discharge Style: Vertical, unobstructed

Stack Opening, (diameter, inches): 24  
Exhaust Temperature (°F): 110  
Exhaust Flow Rate (scfm): Displacement  
Authority for Requirement: DNR PSD Permit #07-A-588-P

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**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: SEP-486**

**Table Dry Mill 71. Associated Equipment.**

| EP       | EU      | EU Description         | Raw Material /Fuel | Rated Capacity | CE     | CE Description    |
|----------|---------|------------------------|--------------------|----------------|--------|-------------------|
| SEP-486A | EU-486A | Cooling Tower Cell #1  | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |
| SEP-486B | EU-486B | Cooling Tower Cell #2  | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |
| SEP-486C | EU-486C | Cooling Tower Cell #3  | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |
| SEP-486D | EU-486D | Cooling Tower Cell #4  | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |
| SEP-486E | EU-486E | Cooling Tower Cell #5  | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |
| SEP-486F | EU-486F | Cooling Tower Cell #6  | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |
| SEP-486G | EU-486G | Cooling Tower Cell #7  | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |
| SEP-486H | EU-486H | Cooling Tower Cell #8  | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |
| SEP-486I | EU-486I | Cooling Tower Cell #9  | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |
| SEP-486J | EU-486J | Cooling Tower Cell #10 | Waste Water        | 15,000 gpm     | CE-486 | Drift Eliminators |

**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.*

**Table Dry Mill 72. Emission Limits.**

| EP       | EU      | Opacity           | PM <sub>10</sub>                                    | Particulate Matter   | Authority for Requirement  |
|----------|---------|-------------------|---|----------------------|----------------------------|
| SEP-486A | EU-486A | 0% <sup>1,2</sup> | 0.0005% <sup>3</sup><br>1.69 lb/hr <sup>1,4,5</sup> | 0.0005% <sup>3</sup> | DNR PSD Permit #07-A-589-P |
| SEP-486B | EU-486B |                   |   |                      |                            |
| SEP-486C | EU-486C |                   |   |                      |                            |
| SEP-486D | EU-486D |                   |   |                      |                            |
| SEP-486E | EU-486E |                   |   |                      |                            |
| SEP-486F | EU-486F |                   |   |                      |                            |
| SEP-486G | EU-486G |                   |   |                      |                            |
| SEP-486H | EU-486H |                   |   |                      |                            |
| SEP-486I | EU-486I |                   |   |                      |                            |
| SEP-486J | EU-486J |                   |   |                      |                            |

**Table Dry Mill 73. General Emission Limits.**

| EP       | EU      | Pollutant | Emission Limit(s)        | Authority for Requirement         |
|----------|---------|-----------|--------------------------|-----------------------------------|
| SEP-486A | EU-486A | Opacity   | 40%                      | 567 IAC 23.3(2)"d"                |
| SEP-486B | EU-486B |           | 20%                      | LCO 10.7                          |
| SEP-486C | EU-486C | PM        | 0.1 gr/dscf <sup>1</sup> | 567 IAC 23.4(7)<br>LCO 10.9(1)"g" |
| SEP-486D | EU-486D |           |                          |                                   |
| SEP-486E | EU-486E |           |                          |                                   |
| SEP-486F | EU-486F |           |                          |                                   |
| SEP-486G | EU-486G |           |                          |                                   |
| SEP-486H | EU-486H |           |                          |                                   |
| SEP-486I | EU-486I |           |                          |                                   |
| SEP-486J | EU-486J |           |                          |                                   |

<sup>1</sup> Standard is expressed as the average of 3 test runs.

<sup>2</sup> Standard is expressed as a six-minute average.

<sup>3</sup> This is the required control efficiency of the drift eliminator in gallons of drift per gallon of cooling water flow.

<sup>4</sup> The limit of PM<sub>10</sub> emissions is established to limit emissions below levels that predict exceedances of the 24-hour NAAQS, the 24-hour increment, and the annual increment for PM<sub>10</sub>.

<sup>5</sup> Emission limit represents the sum of all ten cooling tower cells.

### **Operational Limits & Requirements**

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

#### **Control Device:**

Drift eliminators will be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: LCPH ATI 5248 / PTO 6299

#### **NSPS and NESHAP Applicability:**

This emission unit is subject to Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF - Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550) and is also subject to the requirements of 567 IAC 23.1(4)"cf". Not all of the general provisions in Subpart A are applicable to sources subject to the requirements of Subpart FFFF. See Table 12 to Subpart FFFF of 40 CFR §63 for a detailed listing of which general provisions are applicable.

This emission unit is not subject to any New Source Performance Standards (NSPS) at this time. There are no applicable subparts.

Authority for Requirement: DNR PSD Permit #07-A-589-P

#### **Operating Limits:**

- A. The owner or operator shall furnish the Department with the final detailed plans and specifications for all emission control equipment selected by the owner to meet the

emission limits contained in **Tables Dry Mill 72 and 73**. In addition, the facility shall detail all revisions made to the affected emission units. This information shall be submitted to the Department at least 30 days in advance of construction of any control equipment.

- B. This emission unit is subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40CFR §63.2430 through 40 CFR §63.2550). Specifically, the owner or operator shall comply with all applicable requirements for each heat exchange system according to the provisions in 40 CFR §63.2490.
- C. The circulating water in the cooling tower shall not exceed 4,500 parts per million by weight (ppmw) (4,500 mg/L) total dissolved solids (TDS).
- D. Chromium based or VOC containing water treatment chemicals shall not be used in this emission unit.
- E. The owner or operator shall maintain the cooling tower drift eliminators according to manufacturer's specifications, instructions, and maintenance schedule.

Authority for Requirement: DNR PSD Permit #07-A-589-P

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. This emission unit is subject to all applicable notification, recordkeeping, and reporting requirements, as set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2515, 40 CFR §63.2520, and 40 CFR §63.2525).
- B. The owner or operator shall complete an analysis of the TDS of the water in the cooling tower at least once for each calendar month this emission unit is in operation.
- C. The owner or operator shall maintain a record of the manufacturer's drift loss guarantee for the cooling tower drift eliminators.
- D. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the cooling tower.

Authority for Requirement: DNR PSD Permit #07-A-589-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 59 each (10 cells)

Discharge Style: Vertical, unobstructed

Stack Opening, (diameter, inches): 408 each (10 cells)

Exhaust Temperature (°F): 80 each (10 cells)

Exhaust Flow Rate (scfm): 1,472,222 each (10 cells)

Authority for Requirement: DNR PSD Permit #07-A-589-P

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 either the

temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**Opacity Monitoring:**

Opacity monitoring is not required at this time.

**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: SEP-495, EU-496**

**Table Dry Mill 74. Associated Equipment.**

| EP      | EU     | EU Description               | Raw Material/Fuel | Rated Capacity | CE   | CE Description |
|---------|--------|------------------------------|-------------------|----------------|------|----------------|
| SEP-495 | EU-495 | Dry Grind Unleaded Fuel Tank | Unleaded Fuel     | 2,000 gallons  | None | None           |
| SEP-496 | EU-496 | Dry Grind Diesel Fuel Tank   | Diesel Fuel       | 10,000 gallons | None | None           |

**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.*

**Table Dry Mill 75. Emission Limits.**

| EP      | EU     | VOC                                 | Authority for Requirement  |
|---------|--------|-------------------------------------|----------------------------|
| SEP-495 | EU-495 | Work Practice Standard <sup>1</sup> | DNR PSD Permit #09-A-387-P |
| SEP-496 | EU-496 |                                     | DNR PSD Permit #09-A-388-P |

<sup>1</sup> Fixed roof tank must be constructed with submerged fill pipe and may only be used to store gasoline (EU-495) or distillate fuel oil (EU-496).

**Operational Limits & Requirements**

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

**Operating Limits:**

- A. Fixed roof tank must be constructed with submerged fill pipe and may only be used to store distillate fuel oil.

Authority for Requirement: DNR PSD Permit #09-A-388-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

**Table Dry Mill 76.**

| EP      | LCPH ATI / PTO Numbers | Stack Characteristics             |                        |                              |                    |                          |
|---------|------------------------|-----------------------------------|------------------------|------------------------------|--------------------|--------------------------|
|         |                        | Stack Height (feet, above ground) | Discharge Style        | Stack Opening (inches, dia.) | Exhaust Temp. (°F) | Exhaust Flow Rate (scfm) |
| SEP-495 | 5768 / 6300            | 15                                | Vertical, unobstructed | 2                            | Ambient            | Breathing losses         |
| SEP-496 | 5769 / 6301            | 15                                | Vertical, unobstructed | 2                            | Ambient            | Breathing losses         |

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall

submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**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)



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**Emission Point ID Number: SEP-498****Table Dry Mill 77. Associated Equipment.**

| EP      | EU     | EU Description      | Raw Material /Fuel | Rated Capacity | CE   | CE Description |
|---------|--------|---------------------|--------------------|----------------|------|----------------|
| SEP-498 | EU-498 | Dry Mill Haul Roads | Tank Truck         | Not Applicable | None | None           |

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**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.*

**Table Dry Mill 78. Emission Limits.**

| EP      | EU     | Opacity                           | PM <sub>10</sub>                    | Particulate Matter                  | Authority for Requirement   |
|---------|--------|-----------------------------------|-------------------------------------|-------------------------------------|-----------------------------|
| SEP-498 | EU-498 | No Visible Emissions <sup>1</sup> | Work Practice Standard <sup>2</sup> | Work Practice Standard <sup>2</sup> | DNR PSD Permit #07-A-591-P1 |

<sup>1</sup> No visible emissions shall be observed beyond the lot line of the property.

<sup>2</sup> BACT limits for PM and PM<sub>10</sub> are expressed in the form of work practice standards, as opposed to an emission limit. See 'Operating Limits' for work practice requirements.

**Operating Limits:**

- A. All the haul roads at the Dry Mill shall be paved.
- B. All spills on the haul road surface shall be cleaned up as soon as possible after the spill occurs.
- C. Fugitive emissions of paved haul roads shall be controlled by either completing daily water flushing followed by vacuum sweeping or by obtaining a vacuum sweeper that can meet a minimum of 80% overall control of emissions and completing daily sweeping.
  - 1) Sweeping and watering need not occur on any day that the haul road is not in use.
  - 2) Sweeping and watering need not occur when a rain gauge located at the facility indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period.
  - 3) Sweeping and watering will not be required on calendar days where the daily high temperature is below 35 degrees Fahrenheit.
  - 4) If a facility has applied salt or sand for work or driver safety, the facility is not required to sweep or wash until the road has returned to driving conditions that no longer require the use of salt or sand.
- D. The haul road surface silt loading shall not exceed 0.5 g/m<sup>2</sup>.

Authority for Requirement: DNR PSD Permit #07-A-591-P1

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. Record the frequency of cleaning performed on the haul roads. The facility shall keep a written record of any deviations from Condition C of Operating Limits above due to either suspended use of the haul road or weather conditions.
- B. Record the type of cleaning (i.e., vacuum sweeping, washing, etc.) performed on the haul roads for each cleaning event.

Authority for Requirement: DNR PSD Permit #07-A-591-P1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

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

Discharge Style: NA

Stack Opening, (diameter, inches): NA

Exhaust Temperature (°F): Ambient

Exhaust Flow Rate (acfm): NA

Authority for Requirement: DNR PSD Permit #07-A-591-P1

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 either the temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**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)

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**Emission Point ID Number: SEP-499****Table Dry Mill 79. Associated Equipment.**

| EP      | EU     | EU Description                              | Raw Material/Fuel | Rated Capacity | CE   | CE Description |
|---------|--------|---|-------------------|----------------|------|----------------|
| SEP-499 | EU-499 | Dry Mill VOC Emissions from Equipment Leaks | Equipment Leaks   | Not Applicable | None | None           |

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**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.*

**Table Dry Mill 80. Emission Limits.**

| EP      | EU     | VOC                    | Authority for Requirement  |
|---------|--------|------------------------|----------------------------|
| SEP-499 | EU-499 | 47.67 tpy <sup>1</sup> | DNR PSD Permit #07-A-592-P |

<sup>1</sup> Standard is expressed as a 12-month rolling total.

**Operational Limits & Requirements**

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

**Control Device:**

A Leak Detection and Repair (LDAR) monitoring system shall be used to reduce volatile organic compound emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in 'Operating Condition Monitoring and Recordkeeping' shall be installed, maintained, and operating during the operation of the emission unit and control devices at all times.

Authority for Requirement: LCPH ATI 5251 / PTO 6303

**NSPS and NESHAP Applicability:**

The ADM Dry Mill facility is subject to Subpart A - General Provisions (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart FFFF - Miscellaneous Organic Chemical Manufacturing (40 CFR §63.2430 through 40 CFR §63.2550), and to the requirements of 567 IAC 23.1(4)"cf". Not all of the general provisions in Subpart A are applicable to sources subject to the requirements of Subpart FFFF. See Table 12 to Subpart FFFF of 40 CFR §63 for a detailed listing of which general provisions are applicable.

The ADM Dry Mill facility is subject to Subpart A - General Provisions (40 CFR §60.1 through 40 CFR §60.19) of the New Source Performance Standards (NSPS), Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (40 CFR §60.480 through 40 CFR §60.489), and to the requirements of 567 IAC 23.1(2)"nn".

After the compliance date specified in 40 CFR §63.2445, compliance with NSPS Subpart VV may be demonstrated by complying only with the requirements in NESHAP Subpart FFFF. If

this method of compliance is used, all total organic compounds must be considered, minus methane and ethane, in such equipment for purposes of compliance with NESHAP Subpart FFFF, as if they were organic HAP.

Authority for Requirement: DNR PSD Permit #07-A-592-P

**Operating Limits:**

- A. The component count shall be documented as to the number and types of components used. Components include, but are not limited to, valves, pumps, compressor seals, flanges, etc. Equipment subject to the regulations noted in the NSPS and NESHAP Applicability above shall be identified. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, by designation of process unit, or affected facility per NESHAP Subpart UU (40 CFR §63.1019 through 40 CFR §63.1039) and Consolidated Federal Air Rule Subpart F (40 CFR §65.100 through 40 CFR §65.139).
- B. The owner or operator shall follow the standards of NSPS Subpart VV (40 CFR §60.480 through 40 CFR §60.489) for the purposes of BACT.
- C. The components that are in organic HAP service, as defined in 40 CFR §63.2550, and that are part of the MCPU are subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2430 through 40 CFR §63.2550). Specifically, the owner or operator shall comply with all applicable requirements for equipment leaks, according to the provisions in 40 CFR §63.2480. As specified in 40 CFR §63.2480, the facility must comply with the requirements of NESHAP Subpart UU (40 CFR §63.1019 through 40 CFR §63.1039) or Consolidated Federal Air Rule Subpart F (40 CFR §65.100 through 40 CFR §65.139).

Authority for Requirement: DNR PSD Permit #07-A-592-P

**Operating Condition Monitoring:**

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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. Calculate and record the VOC emissions based on the documented component count. Emission factors shall be based on EPA document 453/R-95-017 titled 'Protocol for Equipment Leak Emission Estimates.' The facility will use the following methodology to calculate VOC emissions.
  - 1) Determine the component count for the ADM ethanol Dry Mill. This count shall be updated with each modification to that section of the facility.
  - 2) On a monthly basis, take a minimum of five samples of liquid from five different locations within each section of the plant (i.e., fermentation, distillation, storage tanks, etc.) and determine the organic content of each sample. If 100% organic content is used, monthly sampling is not required. The average organic content of the streams in each section shall be determined and used in the calculations of emissions. If, after one year of sampling, the average of each month's samples show less than a 2% variation over the twelve months, the average of the 60 samples may be used in future calculations and sampling may be ended.

- i. VOC content sampling shall be completed following the procedures in 40 CFR §60.485(d).
  - 3) From each month's leak detection tracking information, determine the following for each component type:
    - i. The fraction of sources that were repaired the previous month that were found to be leaking this month.
    - ii. The fraction of sources that were successfully repaired after being found to be leaking in the previous month's monitoring.
    - iii. The fraction of sources that were found to not be leaking during the previous month's monitoring, which were found to be leaking during this month's monitoring.
  - 4) Using the information collected in Condition A.3 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' (pages 5-54 through 5-57). Control efficiencies listed in Table 5.2 (page 5-9) may be assumed for those components listed. If these control efficiencies are assumed, the information required by A.3 above need not be recorded for that component type.
  - 5) Using the information collected above, determine the VOC emission over the previous month from each section of 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).
- B. 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 of the Dry Mill, as determined in Condition A above. Calculate and record 12-month rolling totals.
- C. The owner or operator shall follow the notification, recordkeeping, and reporting requirements of NSPS Subpart VV (40 CFR §60.486 and 40 CFR §60.487) for purposes of BACT.
- D. This emission unit is subject to all applicable notification, recordkeeping, and reporting requirements, as set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2515, 40 CFR §63.2520, and 40 CFR §63.2525).

Authority for Requirement: DNR PSD Permit #07-A-592-P

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

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

Discharge Style: NA

Stack Opening, (diameter, inches): NA

Exhaust Temperature (°F): Ambient

Exhaust Flow Rate (acfm): NA

Authority for Requirement: DNR PSD Permit #07-A-592-P1

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 either the

temperature or flow rate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

**Monitoring Requirements**

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

**Stack Testing:**

Stack testing is not required at this time.

**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)

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## 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 and Linn County Code of Ordinance (LCO) Chapter 10, paragraph 10.4.

### 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 Linn County Public Health Air Quality Division. 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 Linn County Public Health Air Quality Division. 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" and LCO 10.22*

#### **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" and LCO 10.18 and 10.19*

#### **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) and LCO 10.14(2)*

#### **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) and LCO 10.16(1)*

**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) 725-8694 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) and LCO 10.14*
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) This notification must be made to Linn County Air Quality Division, in lieu of the Department, upon adoption of the NSPS or NESHAP into Chapter 10.*

#### **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.
- 567 IAC 22.110(1)*

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), recordkeeping, 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) and LCO 10.5*

**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 may be allowed by LCO 10.10.

**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. Exceedances 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) and LCO 10.27*

**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 Linn County, stack test notifications, reports and correspondence shall also be directed to the supervisor of the county air pollution program.

*567 IAC 25.1(7)"a"*, *567 IAC 25.1(9)* and LCO 10.17

**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 local program shall be directed to the supervisor at the appropriate local program. Current address and phone number is:

**Linn County Public Health**  
Air Quality Division  
1240 26<sup>th</sup> Avenue Ct. SW  
Cedar Rapids, IA 52404  
(319) 892-6000

## Appendix A: CAM Plans

### Compliance Assurance Monitoring Plans for ADM Corn Processing Facility located in Cedar Rapids, Iowa

#### I. Background

##### A. Emissions Unit

Description: See CAM Table 1 for full listing  
Identification: See CAM Table 1 for full listing  
Facility: ADM Corn Processing  
Cedar Rapids, Iowa

##### B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: See CAM Table 1 for full listing  
Emission Limit or Standard: See CAM Table 1 for full listing  
Current Monitoring requirements: See CAM Table 1 for full listing

##### C. Control Technology

See CAM Table 1 for full listing

#### II. Monitoring Approach

##### A. Indicator

See CAM Table 1 for a full list of monitoring indicators identified by emission point and associated control equipment.

##### B. Measurement Approach

See CAM Table 1 for individual monitoring frequencies for each of the selected monitoring indicators identified by emission point and associated control equipment.

##### C. Indicator Range

See CAM Table 1 for the appropriate indicator range(s) for each of the selected monitoring indicators identified by emission point and associated control equipment.

##### D. QIP (Quality Improvement Plan) Threshold (Optional)

The QIP threshold is six excursions in a six-month reporting period for all emission points and associated control equipment listed in CAM Table 1.

##### E. Performance Criteria

Data representativeness: Deviations from the normal operating range(s) of the monitoring indicators listed in CAM Table 1 could indicate in the following: decreases in performance efficiency, increases in emissions, and/or the need for maintenance or repair to the associated equipment.

|                                     |   |
|-------------------------------------|---|
| Verification of operational status: | Records of monitoring indicator measurements shall be kept for a minimum of five (5) years and shall be available for inspection by the federal, state, and local air pollution regulatory agencies and/or their representatives. Records shall be legible and maintained in an orderly manner.   |
| QA/QC practices and criteria:       | All monitoring devices shall be calibrated, operated, and maintained according to their manufacturers' specifications.  |
| Monitoring frequency:               | The facility shall check the monitoring indicators at the frequency identified in CAM Table 1 when the associated emission unit (or units) is in operation. Note that CAM monitoring also meets permit monitoring requirements. For example, there is no need to completely two weekly opacity monitoring observations; one observation shall count for the purpose of meeting permit and CAM requirements. |
| Data collection procedure:          | Data shall be collected from sources representative of the emissions of each operating emission unit. Monitoring devices shall be located appropriately to provide representative results and, wherever possible, be readily available for inspection by federal, state, and local air pollution regulatory agencies and/or their representatives.  |
| Averaging period:                   | In all cases, the averaging periods required by this CAM plan are identical to those identified in the emission point-specific entries of the Title V operating permit.   |
| Corrective Action:                  | In all cases, corrective action shall be taken as soon as possible, but no later than eight (8) hours from the observation of the excursion.  |

**CAM Table 1. Summary of CAM Requirements by Emission Point.**

| EP  | EU          | CE                 | Pollutant | Emission Limit(s)               | Monitoring Indicator  | Indicator Level         | Monitoring Frequency | Regulation No.  |
|-----|-------------|--------------------|-----------|---------------------------------|-----------------------|-------------------------|----------------------|---|
| 403 | 403A – 403T | 403<br>(Baghouses) | PM        | 0.004<br>gr/dscf<br>0.1 gr/dscf | ΔP                    | ≥ 0.3 and ≤ 5.0 in W.C. | Daily                | Iowa DNR PSD Permit<br>#07-A-535-P1<br>LCPH ATI 6458 / PTO 6313 |
|     |             |                    |           |                                 | Opacity<br>Monitoring | No Visible Emissions    | Weekly               |   |

Notes:

- <sup>1</sup> Horizontal Cross-Flow Scrubber
- <sup>2</sup> Entoleter Scrubber
- <sup>3</sup> Packed Tower Scrubber
- <sup>4</sup> Ducon Scrubber
- <sup>5</sup> Packed Bed Scrubber
- <sup>6</sup> Dry Combustion Chamber

## Appendix B

### Applicable Federal Requirements

#### New Source Performance Standards:

##### **40 CFR Part 60 Subpart A** – *General Provisions*

A link to the current final rule can be found below:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=3a83c00b45fa1280931cbdb920e6b7a7&mc=true&node=sp40.7.60.a&rgn=div6>

##### **40 CFR Part 60 Subpart Dc** – *Standards of Performance for Small Industrial-Commerical-Institutional Steam Generating Units*

A link to the current final rule can be found below:

[http://www.ecfr.gov/cgi-bin/text-idx?SID=3a83c00b45fa1280931cbdb920e6b7a7&mc=true&node=sp40.7.60.d\\_0c&rgn=div6](http://www.ecfr.gov/cgi-bin/text-idx?SID=3a83c00b45fa1280931cbdb920e6b7a7&mc=true&node=sp40.7.60.d_0c&rgn=div6)

##### **40 CFR Part 60 Subpart Kb** – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984*

A link to the current final rule can be found below:

[http://www.ecfr.gov/cgi-bin/text-idx?SID=3a83c00b45fa1280931cbdb920e6b7a7&mc=true&node=sp40.7.60.k\\_0b&rgn=div6](http://www.ecfr.gov/cgi-bin/text-idx?SID=3a83c00b45fa1280931cbdb920e6b7a7&mc=true&node=sp40.7.60.k_0b&rgn=div6)

##### **40 CFR Part 60 Subpart DD** – *Standards of Performance for Grain Elevators*

A link to the current final rule can be found below:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=3a83c00b45fa1280931cbdb920e6b7a7&mc=true&node=sp40.7.60.dd&rgn=div6>

##### **40 CFR Part 60 Subpart VV** – *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*

A link to the current final rule can be found below:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=3a83c00b45fa1280931cbdb920e6b7a7&mc=true&node=sp40.7.60.vv&rgn=div6>

##### **40 CFR Part 60 Subpart IIII** – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

A link to the current final rule can be found below:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=3a83c00b45fa1280931cbdb920e6b7a7&mc=true&node=sp40.7.60.iiii&rgn=div6>



**Note:** A list of all promulgated NSPS rules, EPA Region 7 staff contact information (for questions pertaining to the rule), compliance assistance links, and a link to each NSPS can be found below:

<https://www.epa.gov/caa-permitting/new-source-performance-standards-region-7>

**National Emissions Standards for Hazardous Air Pollutants:**

**40 CFR Part 63 Subpart A – General Provisions**

A link to the current final rule can be found below:

[http://www.ecfr.gov/cgi-bin/text-idx?SID=3e18dad53f9fe41048f44d5bead0915c&mc=true&tpl=/ecfrbrowse/Title40/40cfr63\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?SID=3e18dad53f9fe41048f44d5bead0915c&mc=true&tpl=/ecfrbrowse/Title40/40cfr63_main_02.tpl)

**40 CFR Part 63 Subpart UU – National Emission Standards for Equipment Leaks – Control Level 2 Standards**

A link to the current final rule can be found below:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=3e18dad53f9fe41048f44d5bead0915c&mc=true&node=sp40.11.63.uu&rgn=div6>

**40 CFR Part 63 Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing**

A link to the current final rule can be found below:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=3e18dad53f9fe41048f44d5bead0915c&mc=true&node=sp40.13.63.ffff&rgn=div6>

**40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

A link to the current final rule can be found below:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=3e18dad53f9fe41048f44d5bead0915c&mc=true&node=sp40.14.63.zzzz&rgn=div6>

**40 CFR Part 63 Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters**

A link to the current final rule can be found below:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=3e18dad53f9fe41048f44d5bead0915c&mc=true&node=sp40.14.63.ddddd&rgn=div6>

**Note:** A list of all promulgated MACT rules, EPA Region 7 staff contact information (for questions pertaining to the rule), compliance assistance links, and a link to each NESHAP can be found below:

<https://www.epa.gov/caa-permitting/maximum-achievable-control-technology-standards-region-7>