Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Penford Products Co.
Facility Location: 1001 First Street SW
Cedar Rapids, IA 52404
Air Quality Operating Permit Number: 04-TV-001R1-M002
Expiration Date: June 21, 2017
Permit Renewal Application Deadline: December 21, 2016

EIQ Number: 92-9185
Facility File Number: 57-01-025

Responsible Official
Name: Timothy Kortemeyer
Title: President & General Manager
Mailing Address: PO Box 428, Cedar Rapids, IA 52406
Phone #: (319) 398-3700

Permit Contact Person for the Facility
Name: Liane Kroemer
Title: Environmental Affairs Manager
Mailing Address: PO Box 428, Cedar Rapids, IA 52406
Phone #: (319) 398-3700

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

For the Director of the Department of Natural Resources

Lori Hanson 5/7/15

Lori Hanson, Supervisor of Air Operating Permits Section Date

Table of Contents

I. Facility Description and Equipment List **5**

II. Plant - Wide Conditions **9**

III. Emission Point Specific Conditions **23**

IV. General Conditions **154**

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

V. Appendix A: Links to the following: **166**

40 CFR Part 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

40 CFR Part 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

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

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

40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Engines

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

40 CFR Part 63 Subpart BBBBBB – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities

Abbreviations

AA ..... acetic anhydride
acfm ..... actual cubic feet per minute
ATI ..... authorization to install
BH ..... baghouse
BPD..... bushels per day
BV ..... bin vent
CFR..... Code of Federal Regulation
CE ..... control equipment
CEM ..... continuous emission monitor
CYC ..... cyclone
^{o}F..... degrees Fahrenheit
DC..... dust collector
EIQ..... emissions inventory questionnaire
EP ..... emission point
EU ..... emission unit
EO..... ethylene oxide
FR ..... filter receiver
gpm ..... gallons per minute
gr./dscf ..... grains per dry standard cubic foot
gr./100 cf ..... grains per one hundred cubic feet
H ..... horizontal
HCl ..... hydrochloric acid
IAC ..... Iowa Administrative Code
IDNR ..... Iowa Department of Natural Resources
LCPH ..... Linn County Public Health

LCO..... Linn County Ordinance
MMBtu..... million British thermal units
MMcf ..... million cubic feet
MVAC..... motor vehicle air conditioner
NESHAP ..... national emission standards for hazardous air pollutants
NAICS ..... North American Industry Classification System
NSPS ..... new source performance standard
ppmv ..... parts per million by volume
PD ..... passive displacement
PTO..... permit to operate
PSD..... prevention of significant deterioration
PO ..... propylene oxide
lb./hr ..... pounds per hour
lb./MMBtu ..... pounds per million British thermal units
SR ..... scalping reel
scfm ..... standard cubic feet per minute
SIC ..... Standard Industrial Classification
SCP..... starch copolymer
SCR ..... scrubber
SBS..... sodium bisulfite
TPH..... tons per hour
TPY ..... tons per year
USEPA..... United States Environmental Protection Agency
V..... vertical, unobstructed
VE ..... visible emissions

Pollutants

PM..... particulate matter
PM_{10} ..... particulate matter ten microns and less in diameter
$PM_{2.5}$ ..... particulate matter two point five microns and less in diameter
SO_2..... sulfur dioxide
NO_x ..... nitrogen oxides
VOC ..... volatile organic compound
CO..... carbon monoxide
HAP..... hazardous air pollutant
SHAP ..... single hazardous air pollutant
THAP ..... total hazardous air pollutants
VHAP ..... volatile hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Penford Products Co.
Permit Number: 04-TV-001-R1-M002

Facility Description: Wet Corn Milling (NAICS 311221; SIC 2046)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Construction Permit Number
1	56S01	Storage Bin #1	1971 / 2039
2	56S02	Storage Bin #2	1970 / 2040
3	56S03	Storage Bin #3	1969 / 2071
4	56S04	Storage Bin #4	1968 / 2041
5	56S05	Storage Bin #5	1967 / 2042
6	56S06	Storage Bin #6	1966 / 2043
7	56S07	Storage Bin #7	1965 / 2044
8	56S08	Storage Bin #8	1964 / 2045
9	56S09	Storage Bin #9	1963 / 2046
10	56S10	Storage Bin #10	1962 / 2047
11	61W21	Pneumatic System – Dryer #1 Mixers to Scalping Reel	5291 / 5266
12	61Z22	Scalping Reel – Dryer #1	5292 / 5267
13	61W16	Vacuum System – Bldg 61	5293 / 5268
14	56FN535001	Starch Conveyors	6526 / 6472
15	61D11	Dryer #1	3283 / 3983
18	61W31	Pneumatic System – Bins to Blender/Loadout #1	5294 / 5269
19	61Z32	Blender #1	5295 / 5270
20	61K39	Bulk Loadout #1	5296 / 5271
21	61W34	Pneumatic System – Blender to Storage Bins	5297 / 5272
23	61D73	Starch Flash Dryer #2	2338 / 3209
	61H73	Starch Flash Dryer #2 Burner	
25	61W80	Pneumatic System – Loadout #3	2551 / 2857
26	61K119	Bulk Loadout #3	2550 / 2858
30	61D99-HEAT	Dryer #3 – Heating Zone – North	2559 / 3984
31	61W105	Pneumatic System – Dryer #3 Mixers to Scalping Reel	2558 / 2850
32	61Z105	Scalping Reel – Dryer #3	2557 / 2851
33	56S11	Storage Bin #11	2556 / 2852
34	56S12	Storage Bin #12	2555 / 2853
35	56S13	Storage Bin #13	2554 / 2854
36	56S14	Storage Bin #14	2553 / 2855
37	61M125	Supersacker Packaging	2552 / 2856
38	61W115	Pneumatic System – Loadout #2	2337 / 2818
39	61K40	Bulk Loadout #2	2334 / 2819
42	61D99-COOL	Dryer #3 – Cooling Zone – South	2674 / 3985
56	61W27	Pneumatic System – Bins to Packing	5561 / 5509
57	57PK546001-2	Starch Packaging	6079 / 5786
58	57BL545501	Pneumatic System – Bins to Packing	6058 / 5880

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Construction Permit Number
59	57PK545501	Supersacker	6059 / 5881
60	57BN526001	Surge Bin	6502 / 6306
61	56BL526001	Bulk Food Loadout	6503 / 6307
89	BLDG03-05-FUGSO2	Fugitive - Bldg 03 - 05	--
90	BLDG16-FUGPM	Fugitive - Bldg 16	--
91	BLDG61-FUGPM	Fugitive - Bldg 61	--
92	BLDG69–FUGPM	Fugitive - Bldg 69	--
94	BUBBLE-VOC-GR	Facility VOC/HAP Bubble - Grind	6083 / 5923
	BUBBLE-VOC-ST	Facility VOC/HAP Bubble - Starch	
95	95-FUGITIVE	Ethanol Fugitives	5991 / 5678
105	13PU095201	Fire Pump	5567 / 5468
106	14TK140001-701	Main Fermentation Vent	5255 / 5959
108	15TK160001	Stillage Tank	5264 / 5516
109	15DISTILLATION	Distillation Vent	5875 / 5671
110	15PU160102	Vacuum Pump – Stillage Evaporator	5257 / 5517
112	17TK210101	Storage Tank – Off-Spec Ethanol	5258 / 5518
114	17TK210201	Storage Tank – Anhydrous Ethanol	5259 / 5519
115	17TK210401	Storage Tank – Gasoline	5353 / 5511
117	17FL211501	Flare (natural gas combustion)	6275 / 6076
	17PU210601	Railcar Loading	
	95PU210801	Truck Loading	
	95PRESSURETEST	Railcar Pressure Test	
118	13CT400001	Cooling Tower – Bldg 13	5262 / 5947
119	25CT400101	Cooling Tower – Bldg 25	5263 / 5948
121	85S01	Soda Ash Storage Bin	2233 / 2813
122	25-VACUUMPUMPS	Vacuum Pumps	5992 / 5938
123	95TK210501	Storage Tank – Denatured Product	5355 / 5512
124	95TK210601	Storage Tank – Denatured Product	5356 / 5513
206	16BL71601	Vacuum System – Bldg 16	5872 / 5646
207	16-CONVEY&LOAD	House Dust Collector – Convey/Load/Transfer	5873 / 5647
241	04-STEEPS&MILL	Steep & Surge Tanks & Millhouse Tanks	6098 / 5919
251	05-GLUTF&VETP	Gluten Filters & Vetter Presses	6086 / 5924
255	05BL53001	Pneumatic System – Gluten Meal Recycle	5269 / 5935
260	05DR042006	Germ Rotary Tube Dryer #6	6281 / 6147
261	05DR42004	Germ Rotary Tube Dryer #4 – Cooling	6087 / 5925
262	05DR42003	Germ Rotary Tube Dryer #3	6088 / 5926
263	05DR42002	Germ Rotary Tube Dryer #2	6089 / 5927
264	05DR42001	Germ Rotary Tube Dryer #1	6090 / 5928
265	05DR42005	Germ Predryer	6091 / 5929
	05MS42001	Germ Predryer (Natural Gas Combustion)	
271	05VP52701	Vacuum Pump - #6 Gluten Filter	5073 / 5936
275	70DR54001	Gluten Meal Dryer	6092 / 5930
	70MS54001	Gluten Meal Dryer (Natural Gas Combustion)	
279	05-PROCESS-TKS	Bldg 05 Process Tanks	6601 / 6439
285	58-CORNCONVEY	Corn Unloading & Handling	6094 / 5932
290	08TANKS	Starch Slurry Tanks – Bldg 8	6442 / 6214
294	58W22	Vacuum System – Bldg 58/59	6096 / 5934
299	95W01	Hexane Vapor Extraction	2959 / 2861
325	25BD171601 25TK171601	Starch Reslurry – Bldg 25	6312 / 6101

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Construction Permit Number
403	69Z02	Blender #2	5305 / 5281
404	69Z482501	Blender #1	4356 / 4451
407	69-LOADOUTMID	Bulk Loadout – Middle	5307 / 5283
409	69W11	Pneumatic System – Dryer #11	5308 / 5284
413	69W02	Pneumatic System – Blender #2 & Finish Bins	5309 / 5285
414	69Z11	Scalping Reel – Dryer #11	5310 / 5286
421	69BN490101	Storage Bin #1	3995 / 3995
423	69BN490301	Storage Bin #3	3996 / 3996
425	69BN490501	Storage Bin #5	3997 / 3997
427	69BN490701	Storage Bin #7	3998 / 3998
429	69BN490901	Storage Bin #9	3999 / 3999
430	69BN491001	Storage Bin #10	4000 / 4000
431	69BN491101	Storage Bin #11	4001 / 4001
446	69D11	Dryer #11	-- / 1852
457	69D12	Dryer #12	3285 / 3989
460	69W22	Vacuum System – Bldg 69	3286 / 3990
461	69Z12	Scalping Reel – Dryer #12	5311 / 5287
463	69W12	Pneumatic System – Dryer #12 to Scalping Reel	5312 / 5288
464	69W05	Pneumatic System – ABC Storage Bins to Bldg 69	5313 / 5289
465	69W16	Pneumatic System – ABC Bins to Bulk Loadout	5314 / 5290
466	69W12A	Pneumatic System – Dryer #12 SR to Bins/Loadout	5315 / 5291
467	69-LOADOUTEAST	Bulk Loadout – East	5316 / 5292
468	69-LOADOUTWEST	Bulk Loadout – West	5317 / 5293
469	69W01	Pneumatic System – Blender #1 & Finish Bins	5318 / 5294
472	69K17A-B	Bulk Loadout Conveyor - North	1424 / 1281
473	69K18A-B	Bulk Loadout Conveyor - South	1425 / 1280
477	69T19-39	Treating Tanks – Bldg 69	-- / 1851
478	77TANKS	Tanks – Bldg 77 & 96	6169 / 6146
480	97-REACTORS-EO	EO Reactors	6170 / 5949
	97-REACTORS-PO	PO Reactors	
481	68T51-52	Treating Tanks – Bldg 68	6162 / 5950
	68T25	SBS Tank	
521	65BO201001	Boiler #1	5547 / 5399
522	65BO202001	Boiler #2	5548 / 5400
524A	65BO203002	Boiler #3	6180 / 5957
575	93-UNLOADSALT1	Salt Tank #1	3218 / 3203
576	93-UNLOADSALT2	Salt Tank #2	3216 / 3204
577	93-UNLOADSALT3	Salt Tank #3	3215 / 3205
582	94-UNLOADAA	AA Unload and Storage Tank	5701 / 5508
	94-UNLOADHCL	HCl Unload and Storage Tanks	
	95T097201	AdA Unload and Storage Tank	
685	95T100B	Reslurry Tank	6174 / 5958
741	67DR619001	Starch Spray Dryer	6697 / 6473
752	67-R&D	R&D Scrubber	6014 / 5743

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU047	Dryers No. 1 - 2 Vacuum Pump
EU048	Dryers No. 1 - 2 Vacuum Pump
EU049	Dryer No. 3 Vacuum Pump
EU050	Dryers No. 1 – 2 Vacuum Pump
EU070	Evaporator Vacuum Pump
EU100	Treatment Chemical Storage
EU134	Furnaces (natural gas)
EU181	N. Equalization Tank
EU188	Wastewater Flume
EU231	Dust Vent on Top of Silo
EU232	Dust Vent on Top of Silo
EU233	Dust Vent on Top of Silo
EU234	Dust Vent on Top of Silo
EU235	Dust Vent on Top of Silo
EU236	Dust Vent on Top of Silo
EU237	Dust Vent on Top of Silo
EU238	Dust Vent on Top of Silo
EU239	Dust Vent on Top of Silo
EU240	Dust Vent on Top of Silo
EU266	No. 1 Gluten Filter Vacuum Pump
EU267	No. 2 Gluten Filter Vacuum Pump
EU268	No. 3 Gluten Filter Vacuum Pump
EU269	No. 4 Gluten Filter Vacuum Pump
EU270	No. 5 Gluten Filter Vacuum Pump
EU323	Vacuum Pump – B25
EU329	HCl Tank Vent
EU333	Saccharification Tanks
EU373	Bubble VOC, Sugar
EU433	No. 9 Vacuum Pump
EU434	No. 10 Vacuum Pump
EU435	No. 11 Vacuum Pump
EU436	No. 12 Vacuum Pumps
EU583	Fugitive EO and PO Emissions
EU584	Fugitive Chlorine Emissions
EU587	Fugitive SCP Loadout
EU588	Fuel Oil Storage Tanks
EU623	Vacuum Pump Discharge

II. Plant-Wide Conditions

Facility Name: Penford Products Co.
Permit Number: 04-TV-001R1-M002

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

Permit Duration

The term of this permit is: less than five years
Commencing on: June 22, 2012
Ending on: June 21, 2017

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.

Plant-Wide Emission Limits

The atmospheric emissions from the plant as a whole shall not exceed the following:

Pollutant: Single Hazardous Air Pollutant (HAP)
Emission Limit(s): 9.4 tpy
Authority for Requirement: LCPH ATI 6083 / PTO 5923

Pollutant: Combined Hazardous Air Pollutants (HAPs)
Emission Limit(s): 24.4 tpy
Authority for Requirement: LCPH ATI 6083 / PTO 5923

Plant-Wide Record Keeping:
All records as required 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.

- When a single HAP emission rate (facility-wide) reaches 8 tons based on a 12-month rolling total, the facility will be required to track and record HAP emissions on a **daily** basis to ensure compliance with the requested minor limits. This is to occur each time the facility reaches this emissions level. Once the emissions fall below 8 tons, the facility can return to monitoring single HAP emissions and record on a monthly basis.
- When the combination HAP emission rate (facility-wide) reaches 20 tons based on a 12-month rolling total, the facility will be required to track and record HAP emissions on a **daily** basis to ensure compliance with the requested minor limits. This is to occur each time the facility reaches this emissions level. Once the emissions fall below 20 tons, the facility can return to monitoring the combined HAP emissions and record on a monthly basis.

Authority for Requirement: LCPH ATI 6083 / PTO 5923

Plant-Wide Reporting:
The following information shall be submitted to this department by the 30th of each month for the previous quarter (January 30, April 30, July 30 and October 30).

- Submit a quarterly report summarizing the facility's 12-month rolling sum for total HAP emissions.

Authority for Requirement: LCPH ATI 6083 / PTO 5923

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_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"
LCO 10.12(2)

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, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.

5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"
LCO 10.13

Plant-Wide Monitoring
The units listed with each O&M plan must meet the operating and maintenance requirements listed below.

Agency Operation & Maintenance Plan
Baghouses

Baghouse Parameters
- Baghouse Types: Bin Vent, Dust Collectors, and Filter Receivers
- Associated Emission Units:
  Bin Vents:
  EP001, EP002, EP003, EP004, EP005, EP006, EP007, EP008, EP009, EP010, EP033, EP034, EP035, EP036, EP060, EP121, EP421, EP423, EP425, EP427, EP429, EP430, EP431
  Dust Collectors:
  EP012, EP014, EP019, EP020, EP026, EP032, EP037, EP039, EP057, EP059, EP061, EP325, EP403, EP404, EP407, EP414, EP461, EP467, EP468, EP472, EP473, EP685, EP741
  Filter Receivers:
  EP011, EP013, EP018, EP021, EP025, EP031, EP038, EP056, EP058, EP206, EP255, EP294, EP409, EP413, EP460, EP463, EP464, EP465, EP466, EP469
- Pollutants Controlled: PM, PM_{10}, $PM_{2.5}$
- Daily no visible emissions readings are required for emission points 38 and 39 per the construction permit requirements.
- Visible emissions monitoring is not required for emission point 60 as this source exhausts internal to a building.

General Monitoring Guidelines
- Penford will monitor process and control equipment operations to maintain compliance with applicable permit terms, conditions, and requirements.
- Penford will perform Weekly Monitoring: The Operation's Department personnel will obtain at least one reading per every seven days in which equipment is operating with product. Within a calendar month, the seven days are sequential, but not necessarily consecutive. Monitoring is not required during periods of time greater than one week in which the source does not operate with product.
- For Weekly Monitoring of visible emissions, Department personnel will observe stack exhaust to ensure no visible emissions occur while the equipment is operating with product.
  - If weather conditions prevent visible emissions monitoring, the observer will note the weather condition on the monitoring form. If an observation is necessary to meet the required weekly monitoring, at least three attempts will be made to retake the observation throughout the day. If unsuccessful that day due to weather, an observation will be made the next possible day in which the equipment is operating with product and weather permits.
- For Weekly Monitoring of differential pressure, Department personnel will record the differential pressure across the baghouse.
- Penford will perform Annual Monitoring: The Maintenance Department will perform preventive maintenance (PM) on equipment at least once during a 12-month period. Preventive maintenance is scheduled utilizing a Computerized Maintenance Management System (CMMS). Monitoring is performed at least once within a consecutive 12-month time period as long as the equipment was not out-of-service for an extended period of time.
  - If the equipment is out-of-service for an extended period of time (and locked out per the Lockout/Tagout Program), then the annual PM will indicate an out-of-service status in lieu of performing a complete PM. If equipment is out-of-service for an extended period of time, then the annual monitoring PM will be performed on the equipment before it is started up.
- Penford makes a commitment to take timely corrective action during periods of excursion where the visual or mechanical indicators are out of range. An excursion is determined by the averaged discrete data point over a period of time or the presence of a monitored abnormal condition. An

excursion does not necessarily indicate a deviation or violation of applicable permit terms, conditions, and/or requirements.

- If through monitoring Penford finds an abnormal condition, such as visible emissions or monitoring equipment indicators out of range, Penford will take corrective action. An abnormal condition does not necessarily indicate a deviation or violation of applicable permit terms, conditions, and/or requirements.
- Penford will take corrective action in accordance with the severity of the excursion/abnormal condition. Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion/abnormal condition.
- Corrective actions include, but are not limited to:
  - Investigating the cause of the excursion/abnormal condition;
  - Verifying that the excursion/abnormal condition is not start-up/shutdown related;
  - Notifying area Team Leader or Facility Manager of the excursion/abnormal condition;
  - Writing/submitting a Work Order to the Maintenance Department;
  - Performing repairs or adjustments that return the process and control operations to normal;
  - Repairing and/or replacing the filter media;
  - Shutting down the process and control equipment.
  - For visible emissions, if corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If a Method 9 observation is made that exceeds the Linn County emission-point-specific PTO limit or exceeds 20% opacity (if the stack has no Linn County PTO limit), then a violation would result.
- Corrective actions will result in one of the following:
  - If the corrective action returns the process and control equipment operations to normal, the excursion/abnormal condition does not result in a monitoring deviation.
  - If the corrective action does not correct the excursion/abnormal condition or no corrective action is taken, then a monitoring deviation results.
- If corrective actions do not return process and control equipment operations to normal, Penford will perform the following follow-up actions, as applicable:
  - Promptly report the excursion/abnormal condition to Linn County;
  - Shut down the process and control equipment;
  - Conduct source testing within 90 days of the excursion/abnormal condition to demonstrate compliance.
    - If the test demonstrates compliance with emission limits, Penford will determine new indicator ranges for monitoring and incorporate on monitoring form;
    - If the test demonstrates noncompliance with emission limits, Penford will, within 60 days, propose a schedule to implement corrective action to bring the source into compliance and conduct source testing to demonstrate compliance;
  - Report monitoring deviation(s) as required by IDNR requirements.
- If the required monitoring, recordkeeping, or stack tests, are not performed within specified time periods, then the resulting deviations and/or violations will be reported per IDNR requirements.

Monitoring Methods

- This Operation and Maintenance Plan utilizes the following monitoring methods to demonstrate compliance.
  - Operator Assessment of Visible Emissions
  - Operator Evaluation of Pressure Drop Indicators
  - Maintenance Department Equipment Integrity Inspection and Remediation Procedures
- Weekly (by Operation's Department)
  - Assess exhaust to ensure no visible emissions occur from the stack while the equipment is operating with product.
  - Check baghouse differential pressure.
  - Observe additional mechanical, visual and audible conditions.
- Annually (by Maintenance Department)
  - Inspect exterior of baghouse.
  - Inspect interior of clean air plenum, if accessible.

- Inspect interior of dusty section of the air plenum.
- Inspect filter media.
- Inspect the compressed-air delivery system.
- Inspect the air pulsing system.
- Inspect the differential pressure monitoring system.
- Inspect/validate differential pressure measuring equipment.
- Observe complete pulse cycle, if no smart timer installed.
- Verify smart timer functionality, if installed.
- Verify high-level alarm, if applicable.
- Inspect airlock and motor, if applicable.
- Inspect fan and motor, if applicable.
- Inspect blower and motor, if applicable.

Record Keeping and Reporting

- Penford will maintain records of the following:
  - Weekly Operation's and annual Maintenance monitoring logs in written and/or electronic form.
  - Corrective actions resulting from the monitoring noted on Operations Monitoring Forms and/or Maintenance Work Orders or Preventive Maintenance logs, in written and/or electronic form, as appropriate.
- Records will be kept for at least five years and be available upon request.

Quality Control

- The baghouses will be operated and maintained according to manufacturer recommendations and/or as outlined in the above monitoring requirements.
- Penford will maintain an adequate inventory of spare parts.

Authority for Requirement: 567 IAC 22.108(3)"b"

Agency Operation & Maintenance Plan
Scrubbers

Scrubber Parameters

- Scrubber Type: Packed Bed, Tray, Venturi, Other
- Associated Emission Units:
  Packed Bed:
  EP109, EP251, EP279, EP477, EP478, EP480, EP481, EP582
  Tray:
  EP030
  Venturi:
  EP015, EP042, EP260, EP457
  Other:
  EP290, EP575, EP576, EP577, 752
- Pollutants Controlled:
  PM, PM_{10}, $PM_{2.5}$, SO_2, VOC, AA, Chlorine, EO, PO, HCl
- Weekly no visible emissions readings have been waived for emission points 251, 279, 290, 477, 478, 480, 481, and 582 because these units do not emit particulate matter and are not expected to have visible emissions.
- Emission points 42, 480, 575, 576, and 577 require daily monitoring of scrubber operating parameters such as differential pressure, recirculation rate, pH, and solids content per the construction permit requirements and as noted in the Emission Point-Specific section of the permit.

General Monitoring Guidelines

- Penford will monitor process and control equipment operations to maintain compliance with applicable permit terms, conditions, and requirements.
- Penford will perform Weekly Monitoring: The Operation's Department personnel will obtain at least one reading per every seven days in which equipment is operating with product. Within a calendar month, the seven days are sequential, but not necessarily consecutive. Monitoring is not required during periods of time greater than one week in which the source does not operate with product.
- For Weekly Monitoring of visible emissions, if applicable, Department personnel will observe stack exhaust to ensure no visible emissions occur while the equipment is operating with product.
  - If weather conditions prevent visible emissions monitoring, the observer will note the weather condition on the monitoring form. If an observation is necessary to meet the required weekly monitoring, at least three attempts will be made to retake the observation throughout the day. If unsuccessful that day due to weather, an observation will be made the next possible day in which the equipment is operating with product and weather permits.
- For Weekly Monitoring of scrubber operating parameters, such as differential pressure, recirculation rate, pH, and solids content, Department personnel will record applicable operating parameters for each scrubber.
- Penford will perform Annual Monitoring: The Maintenance Department will perform preventive maintenance (PM) on equipment at least once during a 12-month period. Preventive maintenance is scheduled utilizing a Computerized Maintenance Management System (CMMS). Monitoring is performed at least once within a consecutive 12-month time period as long as the equipment was not out-of-service for an extended period of time.
  - If the equipment is out-of-service for an extended period of time (and locked out per the Lockout/Tagout Program), then the annual PM will indicate an out-of-service status in lieu of performing a complete PM. If equipment is out-of-service for an extended period of time, then the annual monitoring PM will be performed on the equipment before it is started up.
- Penford makes a commitment to take timely corrective action during <u>periods of excursion</u> where the visual or mechanical indicators are out of range. An excursion is determined by the averaged discrete data point over a period of time or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a deviation or violation of applicable permit terms, conditions, and/or requirements.
- If through monitoring Penford finds an <u>abnormal condition</u>, such as visible emissions or monitoring equipment indicators out of range, Penford will take corrective action. An abnormal condition does not necessarily indicate a deviation or violation of applicable permit terms, conditions, and/or requirements.
- Penford will take <u>corrective action</u> in accordance with the severity of the excursion/abnormal condition. Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion/abnormal condition.
- Corrective actions include, but are not limited to:
  - Investigating the cause of the period of excursion/abnormal condition;
  - Verifying that the excursion/abnormal condition is not start-up/shutdown related;
  - Notifying area Team Leader or Facility Manager of the excursion/abnormal condition;
  - Writing/submitting a Work Order to the Maintenance Department;
  - Performing repairs or adjustments that return the process and control operations to normal;
  - Repairing and/or replacing equipment components;
  - Shutting down the process and control equipment.
  - For visible emissions, if corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If a Method 9 observation is made that exceeds the Linn County emission-point-specific PTO limit or exceeds 20% opacity (if the stack has no Linn County PTO limit), then a <u>violation</u> would result.
- Corrective actions will result in one of the following:
  - If the corrective action returns the process and control equipment operations to normal, the excursion/abnormal condition does not result in a monitoring deviation.
  - If the corrective action does not correct the excursion/abnormal condition or no corrective action is taken, then a monitoring deviation results.

- If corrective actions do not return process and control equipment operations to normal, Penford will perform the following follow-up actions, as applicable:
  - Promptly report the excursion/abnormal condition to Linn County;
  - Shut down the process and control equipment;
  - Conduct source testing within 90 days of the excursion/abnormal condition to demonstrate compliance.
    - If the test demonstrates compliance with emission limits, Penford will determine new indicator ranges for monitoring and incorporate on monitoring form;
    - If the test demonstrates noncompliance with emission limits, Penford will, within 60 days, propose a schedule to implement corrective action to bring the source into compliance and conduct source testing to demonstrate compliance;
  - Report monitoring deviation(s) as required by IDNR requirements.
- If the required monitoring, recordkeeping, or stack tests, are not performed within specified time periods, then the resulting deviations and/or violations will be reported per IDNR requirements.

Monitoring Methods

- This Operation and Maintenance Plan utilizes the following monitoring methods to demonstrate compliance.
  - Operator Assessment of Visible Emissions
  - Operator Evaluation of Operating Parameter Indicators
  - Maintenance Department Equipment Integrity Inspection and Remediation Procedures
- Weekly (by Operations Department)
  - Assess exhaust to ensure no visible emissions occur from the stack while the equipment is operating with product, if applicable.
  - Check operating parameters, such as differential pressure, recirculation rate, pH, and solids content, as applicable.
  - Observe additional mechanical, visual and audible conditions.
- Annually (by Maintenance Department)
  - Inspect exterior of scrubber.
  - Inspect interior of scrubber, if accessible.
  - Inspect integrity of scrubber packing, if applicable and accessible.
  - Inspect liquid distribution system, if applicable.
  - Inspect/validate differential pressure monitoring equipment.
  - Inspect demister pad/mist eliminator zone.
  - Inspect de-entrainment drain lines (internal) for evidence of plugging, if applicable.
  - Inspect/validate pH transmitter on alkaline and acid scrubbers.
  - Inspect/test high-level alarm, if applicable.
  - Inspect/test low-level alarm, if applicable.
  - Inspect/validate mass flow meter, if applicable.
  - Inspect recycle pump and motor.
  - Inspect scrubber fan and motor.

Record Keeping and Reporting

- Penford will maintain records of the following:
  - Weekly Operation's and annual Maintenance monitoring logs in written and/or electronic form.
  - Corrective actions resulting from the monitoring noted on Operations Monitoring Forms and/or Maintenance Work Orders or Preventive Maintenance logs, in written and/or electronic form, as appropriate.
- Records will be kept for at least five years and be available upon request.

Quality Control

- The scrubbers will be operated and maintained according to manufacturer recommendations and/or as outlined in the above monitoring requirements.
- Penford will maintain an adequate inventory of spare parts.

Authority for Requirement: 567 IAC 22.108(3)"b"

Cyclone Parameters

- Cyclone Type: Dry
- Associated Emission Units:
  EP261, EP262, EP263, EP264
- Pollutants Controlled: PM, PM_{10}, $PM_{2.5}$

General Monitoring Guidelines

- Penford will monitor process and control equipment operations to maintain compliance with applicable permit terms, conditions, and requirements.
- Penford will perform Weekly Monitoring: The Operation's Department personnel will obtain at least one reading per every seven days in which equipment is operating with product. Within a calendar month, the seven days are sequential, but not necessarily consecutive. Monitoring is not required during periods of time greater than one week in which the source does not operate with product.
- For Weekly Monitoring of visible emissions, Department personnel will observe stack exhaust to ensure no visible emissions occur while the equipment is operating with product.
  - If weather conditions prevent visible emissions monitoring, the observer will note the weather condition on the monitoring form. If an observation is necessary to meet the required weekly monitoring, at least three attempts will be made to retake the observation throughout the day. If unsuccessful that day due to weather, an observation will be made the next possible day in which the equipment is operating with product and weather permits.
- For Weekly Monitoring of static/differential pressure, Department personnel will record the gauge pressure reading.
- Penford will perform Annual Monitoring: The Maintenance Department will perform preventive maintenance (PM) on equipment at least once during a 12-month period. Preventive maintenance is scheduled utilizing a Computerized Maintenance Management System (CMMS). Monitoring is performed at least once within a consecutive 12-month time period as long as the equipment was not out-of-service for an extended period of time.
  - If the equipment is out-of-service for an extended period of time (and locked out per the Lockout/Tagout Program), then the annual PM will indicate an out-of-service status in lieu of performing a complete PM. If equipment is out-of-service for an extended period of time, then the annual monitoring PM will be performed on the equipment before it is started up.
- Penford makes a commitment to take timely corrective action during <u>periods of excursion</u> where the visual or mechanical indicators are out of range. An excursion is determined by the averaged discrete data point over a period of time or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a deviation or violation of applicable permit terms, conditions, and/or requirements.
- If through monitoring Penford finds an <u>abnormal condition</u>, such as visible emissions or monitoring equipment indicators out of range, Penford will take corrective action. An abnormal condition does not necessarily indicate a deviation or violation of applicable permit terms, conditions, and/or requirements.
- Penford will take <u>corrective action</u> in accordance with the severity of the excursion/abnormal condition. Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion/abnormal condition.
- Corrective actions include, but are not limited to:
  - Investigating the cause of the excursion/abnormal condition;
  - Verifying that the excursion/abnormal condition is not start-up/shutdown related;
  - Notifying area Team Leader or Facility Manager of the excursion/abnormal condition;
  - Writing/submitting a Work Order to the Maintenance Department;
  - Performing repairs or adjustments that return the process and control operations to normal;

- Repairing and/or replacing a component (e.g., airlock, level detector);
- Shutting down the process and control equipment.
- For visible emissions, if corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If a Method 9 observation is made that exceeds the Linn County emission-point-specific PTO limit or exceeds 20% opacity (if the stack has no Linn County PTO limit), then a violation would result.

- Corrective actions will result in one of the following:
  - If the corrective action returns the process and control equipment operations to normal, the excursion/abnormal condition does not result in a monitoring deviation.
  - If the corrective action does not correct the excursion/abnormal condition or no corrective action is taken, then a monitoring deviation results.
- If corrective actions do not return process and control equipment operations to normal, Penford will perform the following follow-up actions, as applicable:
  - Promptly report the excursion/abnormal condition to Linn County;
  - Shut down the process and control equipment;
  - Conduct source testing within 90 days of the excursion/abnormal condition to demonstrate compliance.
    - If the test demonstrates compliance with emission limits, Penford will determine new indicator ranges for monitoring and incorporate on monitoring form;
    - If the test demonstrates noncompliance with emission limits, Penford will, within 60 days, propose a schedule to implement corrective action to bring the source into compliance and conduct source testing to demonstrate compliance;
  - Report monitoring deviation(s) as required by IDNR requirements.
- If the required monitoring, recordkeeping, or stack tests, are not performed within specified time periods, then the resulting deviations and/or violations will be reported per IDNR requirements.

Monitoring Methods

- This Operation and Maintenance Plan utilizes the following monitoring methods to demonstrate compliance.
  - Operator Assessment of Visible Emissions
  - Operator Evaluation of Static/Differential Pressure Indicators
  - Maintenance Department Equipment Integrity Inspection and Remediation Procedures
- Weekly (by Operations Department)
  - Assess exhaust to ensure no visible emissions occur from the stack while the equipment is operating with product.
  - Check cyclone static/differential pressure.
  - Observe additional mechanical, visual and audible conditions.
- Annually (by Maintenance Department)
  - Inspect the pressure monitoring system, if applicable.
  - Inspect/validate pressure-measuring equipment, if applicable.
  - Inspect exterior of cyclone.
  - Inspect associated exterior ductwork.
  - Inspect interior of cyclone, if accessible.
  - Inspect scrubbing medium and associated system, if applicable.
  - Inspect/test high-level alarm, if applicable.
  - Inspect airlock and motor, if applicable.
  - Inspect fan and motor, if applicable.
  - Inspect blower and motor, if applicable.

Record Keeping and Reporting

- Penford will maintain records of the following:
  - Weekly Operation's and annual Maintenance monitoring logs in written and/or electronic form.
  - Corrective actions resulting from the monitoring noted on Operations Monitoring Forms and/or Maintenance Work Orders or Preventive Maintenance logs, in written and/or electronic form, as appropriate.
- Records will be kept for at least five years and be available upon request.

Quality Control

- The cyclones will be operated and maintained according to manufacturer recommendations and/or as outlined in the above monitoring requirements.
- Penford will maintain an adequate inventory of spare parts.

Authority for Requirement: 567 IAC 22.108(3)"b"

Agency Operation & Maintenance Plan
Thermal Oxidizer

Thermal Oxidizer Parameters

- Thermal Oxidizer Type: Flare
- Associated Emission Units: EP117
- Pollutants Controlled: VOC, VHAP

General Monitoring Guidelines

- Penford will monitor process and control equipment operations to maintain compliance with applicable permit terms, conditions, and requirements.
- Penford will perform Weekly Monitoring: The Operation's Department personnel will obtain at least one reading per every seven days in which equipment is operating with product. Within a calendar month, the seven days are sequential, but not necessarily consecutive. Monitoring is not required during periods of time greater than one week in which the source does not operate with product.
- For Weekly Monitoring of visible emissions, Department personnel will observe stack exhaust to ensure no visible emissions occur while waste gases are being flared.
  - If weather conditions prevent visible emissions monitoring, the observer will note the weather condition on the monitoring form. If an observation is necessary to meet the required weekly monitoring, at least three attempts will be made to retake the observation throughout the day. If unsuccessful that day due to weather, an observation will be made the next possible day in which the equipment is operating with product and weather permits.
- For Weekly Monitoring of flare stack exhaust temperature, Department personnel will record the temperature in the exhaust stack of the flare while waste gases are being flared.
- Penford will perform Annual Monitoring: The Maintenance Department will perform preventive maintenance (PM) on equipment at least once during a 12-month period. Preventive maintenance is scheduled utilizing a Computerized Maintenance Management System (CMMS). Monitoring is performed at least once within a consecutive 12-month time period as long as the equipment was not out-of-service for an extended period of time.
  - If the equipment is out-of-service for an extended period of time (and locked out per the Lockout/Tagout Program), then the annual PM will indicate an out-of-service status in lieu of performing a complete PM. If equipment is out-of-service for an extended period of time, then the annual monitoring PM will be performed on the equipment before it is started up.
- Penford makes a commitment to take timely corrective action during <u>periods of excursion</u> where the visual or mechanical indicators are out of range. An excursion is determined by the averaged discrete data point over a period of time or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a deviation or violation of applicable permit terms, conditions, and/or requirements.

- If through monitoring Penford finds an abnormal condition, such as visible emissions or monitoring equipment indicators out of range, Penford will take corrective action. An abnormal condition does not necessarily indicate a deviation or violation of applicable permit terms, conditions, and/or requirements.
- Penford will take corrective action in accordance with the severity of the excursion/abnormal condition. Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion/abnormal condition.
- Corrective actions include, but are not limited to:
  - Investigating the cause of the excursion/abnormal condition;
  - Verifying that the excursion/abnormal condition is not start-up/shutdown related;
  - Notifying area Team Leader or Facility Manager of the abnormal condition;
  - Writing/submitting a Work Order to the Maintenance Department;
  - Performing repairs or adjustments that return the process and control operations to normal;
  - Repairing and/or replacing equipment components;
  - Shutting down the process and control equipment.
  - For visible emissions, if corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If a Method 9 observation is made that exceeds the Linn County emission-point-specific PTO limit or exceeds 20% opacity (if the stack has no Linn County PTO limit), then a violation would result.
- Corrective actions will result in one of the following:
  - If the corrective action returns the process and control equipment operations to normal, the excursion/abnormal condition does not result in a monitoring deviation.
  - If the corrective action does not correct the excursion/abnormal condition or no corrective action is taken, then a monitoring deviation results.
- If corrective actions do not return process and control equipment operations to normal, Penford will perform the following follow-up actions, as applicable:
  - Promptly report the excursion/abnormal condition to Linn County;
  - Shut down the process and control equipment;
  - Conduct source testing within 90 days of the excursion/abnormal condition to demonstrate compliance.
    - If the test demonstrates compliance with emission limits, Penford will determine new indicator ranges for monitoring and incorporate on monitoring form;
    - If the test demonstrates noncompliance with emission limits, Penford will, within 60 days, propose a schedule to implement corrective action to bring the source into compliance and conduct source testing to demonstrate compliance;
  - Report monitoring deviation(s) as required by IDNR requirements.
- If the required monitoring, recordkeeping, or stack tests, are not performed within specified time periods, then the resulting deviations and/or violations will be reported per IDNR requirements.

Monitoring Methods

- This Operation and Maintenance Plan utilizes the following monitoring methods to demonstrate compliance.
  - Operator Assessment of Visible Emissions
  - Operator Evaluation of Exhaust Temperature
  - Maintenance Department Equipment Integrity Inspection and Remediation Procedures
- Weekly (by Operations Department)
  - Assess exhaust to ensure no visible emissions occur from the stack while waste gases are being flared.
  - Check flare stack exhaust temperature.
  - Observe additional mechanical, visual and audible conditions.
- Annually (by Maintenance Department)
  - Inspect flare integrity.
  - Inspect waste gas system.
  - Inspect natural gas system.
  - Inspect control system.

- Inspect/validate gauges and monitoring instruments.
- Inspect safety system.

Record Keeping and Reporting

- Penford will maintain records of the following:
  - Weekly Operation's and annual Maintenance monitoring logs in written and/or electronic form.
  - Corrective actions resulting from the monitoring noted on Operations Monitoring Forms and/or Maintenance Work Orders or Preventive Maintenance logs, in written and/or electronic form, as appropriate.
- Records will be kept for at least five years and be available upon request.

Quality Control

- The flares will be operated and maintained according to manufacturer recommendations and/or as outlined in the above monitoring requirements.
- Penford will maintain an adequate inventory of spare parts.

Authority for Requirement: 567 IAC 22.108(3)"b"

Agency Operation & Maintenance Plan
Emission Points with No Associated Control Equipment

This operations and maintenance plan shall apply to the following emission point: 446.

Monitoring Guidelines

The facility makes a commitment to take timely corrective action during periods of excursion where the visual or mechanical indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement.

If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges may be set for monitoring and the agreed upon new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

General

- Monitoring is not required during periods of time greater than one week or longer in which the source does not operate. If the equipment operates at all during the week, monitoring will be performed for that week.

Weekly

- The facility shall observe the stack exhaust weekly to ensure that no visible emissions occur during the material handling operation of the unit and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. If visible emissions are observed, corrective action will be initiated 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 a Method 9 opacity greater than the Linn County PTO limit or >20%, if

no limit in Linn County PTO, is observed, this would be a violation and corrective action will be initiated as soon as possible, but no later than eight hours from Method 9 observation.

- If weather conditions prevent the observer from conducting a visible emissions observation, the observer shall note such conditions on the data observation sheet. If a reading is necessary to meet the required weekly monitoring, at least three attempts shall be made to retake observation throughout the day. If unsuccessful that day due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(3)"b"

Regulatory Authority

This facility is located in Linn County, Iowa. Linn County Public Health Department, 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 Department 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.

Authority for Requirement: 567 IAC 22.108

III. Emission Point-Specific Conditions

Facility Name: Penford Products Co.
Permit Number: 04-TV-001-R1-M002

Emission Point ID Number: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
1	56S01	Storage Bin #1	Starch	25 tph	56Y01	BH-BV
2	56S02	Storage Bin #2	Starch	25 tph	56Y02	BH-BV
3	56S03	Storage Bin #3	Starch	25 tph	56Y03	BH-BV
4	56S04	Storage Bin #4	Starch	25 tph	56Y04	BH-BV
5	56S05	Storage Bin #5	Starch	25 tph	56Y05	BH-BV
6	56S06	Storage Bin #6	Starch	25 tph	56Y06	BH-BV
7	56S07	Storage Bin #7	Starch	25 tph	56Y07	BH-BV
8	56S08	Storage Bin #8	Starch	25 tph	56Y08	BH-BV
9	56S09	Storage Bin #8	Starch	25 tph	56Y09	BH-BV
10	56S10	Storage Bin #10	Starch	25 tph	56Y10	BH-BV

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.

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
1,2,3,4,5, 6,7,8,9, 10	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 11, 12, 13, 14

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
11	61W21	Pneumatic System – Dryer #1 Mixers to Scalping Reel	Starch	17.5 tph	61Y21	BH-FR
12	61Z22	Scalping Reel – Dryer 1	Starch	17.5 tph	61Y23	BH-DC
13	61W16	Vacuum System – Bldg 61	Starch	1 tph	61Y17	BH-FR
14	56FN535001	Starch Conveyors	Starch	1 tph	56BH535001	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
11	PM/PM_{10}	0.01 gr/dscf; 0.153 lb/hr	LCPH ATI 5291 / PTO 5266
12	PM/PM_{10}	0.01 gr/dscf; 0.081 lb/hr	LCPH ATI 5292 / PTO 5267
13	PM/PM_{10}	0.01 gr/dscf; 0.05 lb/hr	LCPH ATI 5293 / PTO 5268
14	PM/PM_{10}	0.26 lb/hr	LCPH ATI 6526 / PTO 6472

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
11,12,13, 14	Opacity	20%	LCPH ATI 5291 / PTO 5266 LCPH ATI 5292 / PTO 5267 LCPH ATI 5293 / PTO 5268 LCPH ATI 6526 / PTO 6472 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5291 / PTO 5266 LCPH ATI 5292 / PTO 5267 LCPH ATI 5293 / PTO 5268 LCPH ATI 6526 / PTO 6472 567 IAC 23.4(7) LCO 10.9(1)"g"

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

Authority for Requirement: LCPH ATI 5291 / PTO 5266; LCPH ATI 5292 / PTO 5267
LCPH ATI 5293 / PTO 5268; LCPH ATI 6526 / PTO 6472

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 maintained between 0.4" and 8.0" w.c. [(1)] **(EP's 11, 12, 13)**

C. The differential pressure across the baghouse shall be maintained between 0.2" and 5.0" w.c. [1] **(EP 14)**

[1] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 5291 / PTO 5266; LCPH ATI 5292 / PTO 5267
LCPH ATI 5293 / PTO 5268; LCPH ATI 6526 / PTO 6472

Operating Condition Monitoring and Recordkeeping:

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of 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. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall monitor and record the differential pressure across the control equipment on a weekly basis.
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 maintain a record of all maintenance completed on the control equipment.

Authority for Requirement: LCPH ATI 5291 / PTO 5266; LCPH ATI 5292 / PTO 5267
LCPH ATI 5293 / PTO 5268; LCPH ATI 6526 / PTO 6472

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
11	5291 / 5266	68	V	8	180	2225
12	5292 / 5267	72	V	7.75	90	1016
13	5293 / 5268	64	V	4	180	728
14	6526 / 6472	65	V	9	80	1400

The temperature and flow rates are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature or flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator 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.

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

Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 15

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
15	61D11	Dryer #1	Starch	20,000 lbs/hr (commercial basis)	61Q11	Scrubber

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
15	PM/PM_{10}	2.07 lb/hr	LCPH ATI 3283 / PTO 3983

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
15	Opacity	20%	LCPH ATI 3283 / PTO 3983 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 3283 / PTO 3983 567 IAC 23.4(7) LCO 10.9(1)"g"

Operational Limits & Requirements

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

Control Device:

A wet scrubber shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 3283 / PTO 3983

Operating Limits:

A. A densitometer shall be installed to monitor the density (g/cc) of the scrubber recycle water. The densitometer readings shall not exceed 1.030 g/cc.
B. The scrubber water recycle rate must be maintained ≥ 248 gpm.
C. The differential pressure shall be maintained between 7.0-14.0 in. w.c.[1]
D. The scrubber shall be maintained according to manufacturer specifications and good operating practices.

[1] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 3283 / PTO 3983

Operating Condition Monitoring and Record keeping:

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 the differential pressure across the scrubber on a weekly basis.
B. The owner or operator shall monitor and record the scrubber water recirculation rate on a weekly basis.
C. The owner or operator shall monitor and record the densitometer readings (g/cc) on a weekly basis.
D. The owner or operator shall maintain records of all maintenance and repair completed on the control device.
E. 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.

Authority for Requirement: LCPH ATI 3283 / PTO 3983

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
15	3283 / 3983	113.8	V	50	113	52725

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 18, 19, 20, 21

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
18	61W31	Pneumatic System – Bins to Blender/Loadout #1	Starch	25 tph	61Y31	BH-FR
19	61Z32	Blender #1	Starch	25 tph	61Y33	BH-DC
20	61K39	Bulk Loadout #1	Starch	25 tph	61Y37	BH-DC
21	61W34	Pneumatic System – Blender to Storage Bins	Starch	25 tph	61Y34	BH-FR

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
18	PM/PM_{10}	0.01 gr/dscf; 0.172 lb/hr	LCPH ATI 5294 / PTO 5269
19	PM/PM_{10}	0.01 gr/dscf; 0.094 lb/hr	LCPH ATI 5295 / PTO 5270
20	PM/PM_{10}	0.01 gr/dscf; 0.160 lb/hr	LCPH ATI 5296 / PTO 5271
21	PM/PM_{10}	0.01 gr/dscf; 0.104 lb/hr	LCPH ATI 5297 / PTO 5272

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
18,19,20, 21	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5294 / PTO 5269 LCPH ATI 5295 / PTO 5270 LCPH ATI 5296 / PTO 5271 LCPH ATI 5297 / PTO 5272 567 IAC 23.4(7) LCO 10.9(1)"g"

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

Authority for Requirement: LCPH ATI 5294 / PTO 5269; LCPH ATI 5295 / PTO 5270
LCPH ATI 5296 / PTO 5271; LCPH ATI 5297 / PTO 5272

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 maintained between 0.4" and 8.0" w.c. [(1)]

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 5294 / PTO 5269; LCPH ATI 5295 / PTO 5270
LCPH ATI 5296 / PTO 5271; LCPH ATI 5297 / PTO 5272

Operating Condition Monitoring and Record keeping:
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 the differential pressure across the control device on a weekly basis.
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 maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5294 / PTO 5269; LCPH ATI 5295 / PTO 5270
LCPH ATI 5296 / PTO 5271; LCPH ATI 5297 / PTO 5272

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
18	5294 / 5269	68	V	8	180	2500
19	5295 / 5270	64	H	5.5 x 8	90	1168
20	5296 / 5271	81	V	10	90	2000
21	5297 / 5272	68	V	8	180	1510

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 23

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
23	61D73	Starch Flash Dryer #2	Starch	12.5 tph	61Q74	Scrubber
	61H73	Starch Flash Dryer #2 Burner	Natural Gas	35 MMBtu/hr		

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
23	Opacity	No Visible Emissions	LCPH ATI 2338 / PTO 3209 DNR PSD #03-A-095
	PM/PM_{10}	0.05 gr/dscf; 24.02 lb/hr; 105.2 tpy	
	NO_x	71 lb/MMscf	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
23	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5294 / PTO 5269 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO_2	500 ppmv	LCPH ATI 2338 / PTO 3209 DNR PSD #03-A-095 LCO 10.12(2) 567 IAC 23.3(3)"e"

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

Control Device:
A wet scrubber shall be installed 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 Record keeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 2338 / PTO 3209

Operating Limits:
The starch flash dryer shall only combust natural gas.

The starch flash dryer shall not combust more than 245.28 MMscf of natural gas per twelve-month rolling period.

The starch flash dryer shall not be used if visible emissions are observed from the emission point associated with this permit. If visible emissions are observed, the facility shall shut down the starch flash

dryer and correct the problem(s) which are causing the unit to emit visible emissions. The dryer cannot be used again until the unit ceases to emit visible emissions.
Authority for Requirement: DNR PSD #03-A-095
LCPH ATI 2338 / PTO 3209

A densitometer shall be used to monitor the percent solids in the scrubber recycle water. The solids in the scrubber recycle water shall not exceed 8 percent or a specific gravity measurement of 1.030 g/cc.
Authority for Requirement: LCPH ATI 2338 / PTO 3209

Operating Condition Monitoring and Record keeping:
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.

- The facility shall record monthly natural gas usage (units of scf/month) for the starch flash dryer. During the initial 12 months of operation, cumulative natural gas usage shall be determined for each month of operation. After the initial 12 months of operation, annual natural gas usage shall be determined on a 12-month rolling basis, for each month of operation.
- The facility shall perform daily visible emissions opacity tests or Method 22 on the starch flash dryer.
- The facility shall record the pressure drop (range) of the scrubber on a daily basis.
- The facility shall record the water flow (recirculation) to the scrubber on a daily basis.

Authority for Requirement: DNR PSD #03-A-095
LCPH ATI 2338 / PTO 3209

- The facility shall record the daily densitometer readings.
- The facility shall record the daily drying rate.
- The facility shall maintain a monthly drying rate log calculated on a 12-month rolling average for Dryer #2.
- The facility shall maintain records of all maintenance and repair completed on the control device.
- The facility shall maintained copies of source test results until a new approved representative test is conducted or for five (5) years, whichever is longer.

Authority for Requirement: LCPH ATI 2338 / PTO 3209

Quarterly Report Requirements:
The following information shall be submitted to this department by the 30th of each month for the previous quarter (January 30, April 30, July 30 and October 30).

- Monthly drying rate based on a 12-month rolling average.

Authority for Requirement: LCPH ATI 2338 / PTO 3209

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
23	2338 / 3209 DNR PSD #03-A-095	118.3	V	72	118	54466 56049 (scfm)

The temperature and flow rates are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Stack Testing:
Pollutant – Particulate Matter
1st Stack Test to be Completed by – June 21, 2015
Test Method – 40 CFR 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202
Authority for Requirement – 567 IAC 22.108(3)

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan for EP023

I. Background

A. Emissions Unit
Facility: Penford Products Co., Cedar Rapids, Iowa
Description: Dryer 2
Identification: EU61D73, EU61H73

B. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: PSD Permit 03-A-095, LCPH PTO 3209
Emission Limit: PM/PM10: 24.02 lb/hr, 0.05 gr/dscf
Monitoring Requirements: Scrubber Water Solids: ≤8% solids (≤1.030 g/cc)

C. Control Technology
Description: Scrubber (CE61Q74)

II. Monitoring Approach

A. Indicator
scrubber water solids

B. Indicator Range
Maximum of 1.030 grams per cubic centimeter.

C. Measurement Approach
Specific gravity measurement using densitometer.

D. Performance Criteria

Data Representativeness: Specific gravity measurement of the scrubber recirculation water.

Verification of Operational Status:	Emission unit operation is verified at the time of measurement. Records of specific gravity readings will be maintained for five years.
QA/QC Practices and Criteria:	Densitometer will be maintained per the manufacturer's specifications.
Monitoring Frequency:	The specific gravity measurement and record will be made daily during a period when the emission unit is in operation.
Data Collection Procedures:	The specific gravity readings will be recorded on the air monitoring form (which may be electronic record in the future).

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 25, 26

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
25	61W80	Pneumatic System – Loadout #3	Starch	25 tph	61Y80	BH-FR
26	61K119	Bulk Loadout #3	Starch	25 tph	61Y81	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
25	PM/PM_{10}	0.01 gr/dscf	LCPH ATI 2551 / PTO 2857
	Opacity	10%	
26	PM/PM_{10}	0.01 gr/dscf; 0.09 lb/hr	LCPH ATI 2550 / PTO 2858
	Opacity	10%	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
25, 26	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

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 installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 2551 / PTO 2857; LCPH ATI 2550 / PTO 2858

Operating Condition Monitoring and Record keeping:
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.

- Weekly pressure differential readings across the dust collector
- Weekly opacity observations when in use (non-CFR reference Method 9)*
- All maintenance completed on the control device

All monitors shall be easily accessible to air pollution personnel.
*If visible emissions are observed, corrective actions shall take place within 8 hours of the observation or by the start of the next working day.
Authority for Requirement: LCPH ATI 2551 / PTO 2857; LCPH ATI 2550 / PTO 2858

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
25	2551 / 2857	62.5	V	8	196	1692
26	2550 / 2858	54.2	Wall Vent	9.5 x 10	90	1000 (dscfm)

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 30

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
30	61D99-HEAT	Dryer #3 – Heating Zone - North	Starch	34,926 lbs/hr (commercial basis)	61Q100	Scrubber

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
30	PM/PM_{10}	0.9 lb/hr	LCPH ATI 2559 / PTO 3984

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
30	Opacity	20%	LCPH ATI 2559 / PTO 3984 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2559 / PTO 3984 567 IAC 23.4(7) LCO 10.9(1)"g"

Operational Limits & Requirements

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

Control Device:

A wet scrubber shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 2559 / PTO 3984

Operating Limits:

A. A densitometer shall be installed to monitor the density (g/cc) of the scrubber recycle water. The densitometer readings shall not exceed 1.030 g/cc.
B. The scrubber water recycle rate must be maintained ≥ 189 gpm.
C. The differential pressure shall be maintained between 2.5 – 4.0 in.w.c.[(1)]
D. The scrubber shall be maintained according to manufacturer specifications and good operating practices.

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 2559 / PTO 3984

Operating Condition Monitoring and Record keeping:

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 the differential pressure across the scrubber on a weekly basis.
B. The owner or operator shall monitor and record the scrubber water recirculation rate on a weekly basis.
C. The owner or operator shall monitor and record the densitometer readings (g/cc) on a weekly basis.
D. The owner or operator shall maintain records of all maintenance and repair completed on the control device.
E. 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.

Authority for Requirement: LCPH ATI 2559 / PTO 3984

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
30	2559 / 3984	99.5	V	60	124	48627

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – June 21, 2015
Test Method – 40 CFR 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202
Authority for Requirement – 567 IAC 22.108(3)

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 31, 32, 33, 34, 35, 36, 37

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
31	61W105	Pneumatic System – Dryer #3 Mixers to Scalping Reel	Starch	15 tph	61Y105	BH-FR
32	61Z105	Scalping Reel – Dryer #3	Starch	17.5 tph	61Y106	BH-DC
33	56S11	Storage Bin #11	Starch	25 tph	56Y11	BH-BV
34	56S12	Storage Bin #12	Starch	25 tph	56Y12	BH-BV
35	56S13	Storage Bin #13	Starch	25 tph	56Y13	BH-BV
36	56S14	Storage Bin #14	Starch	25 tph	56Y14	BH-BV
37	61M125	Supersacker Packaging	Starch	20 tph	61Y126	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
31	PM/PM_{10}	0.01 gr/dscf; 0.28 lb/hr	LCPH ATI 2558 / PTO 2850
32	PM/PM_{10}	0.01 gr/dscf; 0.09 lb/hr	LCPH ATI 2557 / PTO 2851
33	PM/PM_{10}	0.01 gr/dscf; 0.171 lb/hr	LCPH ATI 2556 / PTO 2852
34	PM/PM_{10}	0.01 gr/dscf; 0.171 lb/hr	LCPH ATI 2555 / PTO 2853
35	PM/PM_{10}	0.01 gr/dscf; 0.171 lb/hr	LCPH ATI 2554 / PTO 2854
36	PM/PM_{10}	0.01 gr/dscf; 0.171 lb/hr	LCPH ATI 2553 / PTO 2855
37	PM/PM_{10}	0.01 gr/dscf; 0.09 lb/hr	LCPH ATI 2552 / PTO 2856
31,32,33, 34,35,36, 37	Opacity	10%	LCPH ATI 2558 / PTO 2850 LCPH ATI 2557 / PTO 2851 LCPH ATI 2556 / PTO 2852 LCPH ATI 2555 / PTO 2853 LCPH ATI 2554 / PTO 2854 LCPH ATI 2553 / PTO 2855 LCPH ATI 2552 / PTO 2856

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
31,32,33, 34,35,36, 37	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

Operational Limits & Requirements

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

Control Device:
A baghouse dust collector 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 2558 / PTO 2850 ; LCPH ATI 2557 / PTO 2851
LCPH ATI 2556 / PTO 2852; LCPH ATI 2555 / PTO 2853
LCPH ATI 2554 / PTO 2854; LCPH ATI 2553 / PTO 2855
LCPH ATI 2552 / PTO 2856

Operating Condition Monitoring and Record keeping:
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.

- Weekly pressure drop across the baghouse dust collector
- Weekly opacity observations when in use (non-CFR reference Method 9)*
- All maintenance completed on the control device

All monitors shall be easily accessible to air pollution personnel.
*If visible emissions are observed, corrective actions shall take place within 8 hours of the observation or by the start of the next working day.
Authority for Requirement: LCPH ATI 2558 / PTO 2850; LCPH ATI 2557 / PTO 2851
LCPH ATI 2556 / PTO 2852; LCPH ATI 2555 / PTO 2853
LCPH ATI 2554 / PTO 2854; LCPH ATI 2553 / PTO 2855
LCPH ATI 2552 / PTO 2856

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
31	2858 / 2850	61.5	V	10.25	180	3300 (dscfm)
32	2557 / 2851	61	V	10	90	1000 (dscfm)
33	2556 / 2852	64	Wall Vent	10.5 x 9.4	90	2000 (dscfm)
34	2555 / 2853	64	Wall Vent	10.5 x 9.4	90	2000 (dscfm)
35	2554 / 2854	64	Wall Vent	10.5 x 9.4	90	2000 (dscfm)
36	2553 / 2855	64	Wall Vent	10.5 x 9.4	90	2000 (dscfm)
37	2552 / 2856	54	Wall Vent	9.5 x 10	90	1000 (dscfm)

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 38, 39

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
38	61W115	Pneumatic System – Loadout #2	Starch	25 tph	61Y115	BH-FR
39	61K40	Bulk Loadout #2	Starch	25 tph	61Y116	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
38	PM/PM_{10}	0.01 gr/dscf; 0.17 lb/hr	LCPH ATI 2337 / PTO 2818
39	PM/PM_{10}	0.01 gr/dscf; 0.17 lb/hr	LCPH ATI 2334 / PTO 2819
38,39	Opacity	No VE	DNR PSD #03-A-099 LCPH ATI 2337 / PTO 2818 DNR PSD #03-A-100 LCPH ATI 2334 / PTO 2819

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
38, 39	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

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

Authority for Requirement: DNR PSD #03-A-099; LCPH ATI 2337 / PTO 2818
DNR PSD #03-A-100; LCPH ATI 2334 / PTO 2819

Operating Limits:

- The Conveying to Bulk Loadout system (Conveyor, Loadout #2 system) shall not be operated if visible emissions are observed from the emission point associated with this permit. If visible emissions are observed, the facility shall shut down the system and correct the problem(s) which are causing the unit to emit visible emissions. The system cannot be used again until the unit ceases to emit visible emissions.
- The facility is required to install a Smart Timer™ monitoring system (or equivalent) on the baghouse associated with this permit (DNR PSD #03-A-099 and #03-A-100). The system shall include a continuous readout of the pressure drop across the baghouse and an alarm system which is capable of alerting the facility of system and process malfunctions.

Authority for Requirement: DNR PSD #03-A-099; LCPH ATI 2337 / PTO 2818
DNR PSD #03-A-100; LCPH ATI 2334 / PTO 2819

Operating Condition Monitoring and Record keeping:
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.

- The facility shall perform daily visible emissions opacity tests per Method 22 on the emission point associated with this permit.
- The facility shall continuously monitor the pressure drop (range) across the baghouse associated with this permit.
- Records of all maintenance and repair completed on the control device
- Copies of test results shall be retained until a new approved representative test is conducted or for five (5) years, whichever is longer.

Authority for Requirement: DNR PSD #03-A-099; LCPH ATI 2337 / PTO 2818
DNR PSD #03-A-100; LCPH ATI 2334 / PTO 2819

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
38	2337 / 2818 DNR PSD #03-A-099	61.5	V	10.25	187	2500
39	2334 / 2819 DNR PSD #03-A-100	68	V	15	83	2250

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 42

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
42	61D99-COOL	Dryer #3 – Cooling Zone – South	Starch	34,926 lbs/hr (commercial basis)	61Q150	Scrubber

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
42	PM	1.04 lb/hr; 4.56 tpy	LCPH ATI 2674 / PTO 3985
	PM_{10}	0.8 lb/hr; 3.504 tpy	
	Opacity	10%	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
42	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2674 / PTO 3985 567 IAC 23.4(7) LCO 10.9(1)"g"

Operational Limits & Requirements

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

Control Device:

A wet scrubber shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 2674 / PTO 3985

Operating Limits:

A. This dryer shall be limited to drying 34,926 pounds of starch per hour (commercial basis) based on a 12-month rolling average.
B. A densitometer shall be used to monitor the percent solids in the scrubber recycle water. The solids in the scrubber water recycle water shall not exceed 8 percent or a specific gravity measurement of 1.030 g/cc.
C. The differential pressure across this scrubber shall be maintained between 6.5 in w.c. – 10 in w.c.
D. The recirculation water flow rate in the scrubber shall be no less than 112.5 gpm.
E. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.

Authority for Requirement: LCPH ATI 2674 / PTO 3985

Operating Condition Monitoring and Record keeping:

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.

1. Monitor and record the drying rate (commercial basis) on a daily basis.
2. Maintain a monthly drying rate log calculated on a 12-month rolling average.
3. Monitor and record the solids content in the scrubber recycle water on a daily basis.
4. Monitor and record the differential pressure across the scrubber on a daily basis.
5. Monitor and record the scrubber water recirculation rate on a daily basis.
6. Maintain records of all maintenance and repair completed on the control device.

Authority for Requirement: LCPH ATI 2674 / PTO 3985

Quarterly Report Requirements:
The following information shall be submitted to this department by the 30th of each month for the previous quarter (January 30, April 30, July 30 and October 30).

- Monthly drying rate based on a 12-month rolling average.

Authority for Requirement: LCPH ATI 2674 / PTO 3985

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
42	2674 / 3985	101.2	V	52	109	19500 ± 10% (dscfm)

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 56, 57, 58, 59, 60, 61

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
56	61W27	Pneumatic System – Bins to Packaging	Starch	25 tph	61Y27	BH-FR
57	57PK546001-2	Starch Packaging	Starch	25 tph	61Y29	BH-DC
58	57BL545501	Pneumatic System – Bins to Packaging	Starch	20 tph	57BH545501	BH-FR
59	57PK545501	Supersacker	Starch	20 tph	57BH545502	BH-DC
60	57BN526001	Surge Bin	Starch	20 tph	57BH526001	BH-BV
61	56BL526001	Bulk Food Loadout	Starch	20 tph	57BH526002	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
56	PM/PM_{10}	0.17 lb/hr	LCPH ATI 5561 / PTO 5509
57	PM/PM_{10}	0.2 lb/hr	LCPH ATI 6079 / PTO 5786
58	PM/PM_{10}	0.01 gr/dscf: 0.1 lb/hr	LCPH ATI 6058 / PTO 5880
59	PM/PM_{10}	0.01 gr/dscf; 0.12 lb/hr	LCPH ATI 6059 / PTO 5881
60	PM/PM_{10}	0.01 gr/dscf; 0.014 lb/hr	LCPH ATI 6502 / PTO 6306
61	PM/PM_{10}	0.27 lb/hr	LCPH ATI 6503 / PTO 6307

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
56,57,58, 59, 61	Opacity	20%	LCPH ATI 5561 / PTO 5509 LCPH ATI 6079 / PTO 5786 LCPH ATI 6058 / PTO 5880 LCPH ATI 6059 / PTO 5881 LCPH ATI 6503 / PTO 6307 LCO 10.7
56,57,58, 59,60,61	PM	0.1 gr/dscf	LCPH ATI 5561 / PTO 5509 LCPH ATI 6079 / PTO 5786 LCPH ATI 6058 / PTO 5880 LCPH ATI 6059 / PTO 5881 LCPH ATI 6502 / PTO 6306 LCPH ATI 6503 / PTO 6307 567 IAC 23.4(7) LCO 10.9(1)"g"
60	Opacity	No VE	LCPH ATI 6502 / PTO 6306 LCO 10.5(3)"b"

Operational Limits & Requirements

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

Control Device:

A baghouse (bin vent filters – EP060; baghouse-dust collector – EP061) shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5561 / PTO 5509; LCPH ATI 6079 / PTO 5786
LCPH ATI 6058 / PTO 5880; LCPH ATI 6059 / PTO 5881
LCPH ATI 6502 / PTO 6306; LCPH ATI 6503 / PTO 6307

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 maintained between 0.4" and 8.0" w.c. [(1)]

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 5561 / PTO 5509; LCPH ATI 6079 / PTO 5786
LCPH ATI 6058 / PTO 5880; LCPH ATI 6059 / PTO 5881
LCPH ATI 6502 / PTO 6306; LCPH ATI 6503 / PTO 6307

Operating Condition Monitoring and Record keeping:

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 the differential pressure across the control device on a weekly basis.
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. **(EP 56, 57, 58, 59, and 61 only)**
C. The owner or operator shall maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5561 / PTO 5509; LCPH ATI 6079 / PTO 5786
LCPH ATI 6058 / PTO 5880; LCPH ATI 6059 / PTO 5881
LCPH ATI 6502 / PTO 6306; LCPH ATI 6503 / PTO 6307

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
56	5561 / 5509	67	V	8	180	2200
57	6079 / 5786	74.9	V	10	90	2500 (Bulk Loadout) 1400 (Packing Bags)
58	6058 / 5880	68.6	V	8	80	1200
59	6059 / 5881	76	V	9	80	1500
60	6502 / 6306	-	I	4	80	160
61	6503 / 6307	76	V	6	80	1560

[(1)] Source exhausts internal to Building 61A

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 89

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
89	BLDG03-05-FUGSO2	Fugitive – Bldg 03 – 05	Fugitive Emissions From Corn Wet Milling	105 tph	--	--

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.

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
89	SO_2	500 ppmv	LCO 10.12(2) 567 IAC 23.3(3)"e"

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 90, 91, 92

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
90	BLDG16-FUGPM	Fugitive – Bldg 16	Fugitive Emissions From Loading / Unloading	105 tph	--	--
91	BLDG61-FUGPM	Fugitive – Bldg 61	Fugitive Emissions from Loading / Unloading	37 tph	--	--
92	BLDG69-FUGPM	Fugitive – Bldg 69	Fugitive Emissions from Loading / Unloading	23.2 tph	--	--

Applicable Requirements

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

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

Pollutant: Fugitive Dust

No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired, or demolished, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance. 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.

Authority for Requirement: 567 IAC 23.3(2)"c"
LCO 10.13

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 94

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
94	BUBBLE-VOC-GR	Facility VOC/HAP Bubble (Grind Operations)	Shelled Corn	135 tph (90,000 BPD)	--	--
	BUBBLE-VOC-ST	Facility VOC/HAP Bubble (Starch Operations)	Starch	58.2 tph	--	--

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
94	VOC	0.172 lb/ton (1, 3)	LCPH ATI 6083 / PTO 5923
	VOC	6.06 lb/1,000 bushels (2, 3)	
	VOC	136 tpy (3)	
	SHAP	0.04 lb/ton (1, 3)	
	SHAP	0.61 lb/1,000 bushels (2, 3)	
	SHAP	9.4 tpy (4)	
	THAP	0.106 lb/ton (1, 3)	
	THAP	1.59 lb/1,000 bushels (2, 3)	
	THAP	24.4 tpy (4)	

(1) Plant-wide limit based on the total tons of starch dried
(2) Plant-wide limit based on the total bushels of corn processed
(3) Plant-wide limit for only the grind and starch process associated equipment listed in PTO 5923 Attachment B under Grind Operations and Starch Operations
(4) Plant-wide limit to remain minor for 112(g)

Operational Limits & Requirements

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

A facility emission "Bubble" limit has been established to account for VOC (Volatile Organic Compounds) emissions associated with the grind and starch process. These VOC emissions are the result of a naturally occurring biological process that are generated during the steeping process and are emitted at various emission rates throughout the corn milling and starch finishing operations. The VOC emission sources covered by the bubble limit are divided into two source categories:

1. Grind Operations
2. Starch Operations

A facility emission "Bubble" limit has also been established to account for HAP (Hazardous Air Pollutants) emissions. HAP emissions associated with the grind and starch process are the result of a naturally occurring biological process that are generated during the steeping process and are emitted at various emission rates throughout the corn milling and starch finishing operations. For the plant to remain minor for 112(g) applicability, the plant must also quantify HAP emissions from all other sources at the facility. The HAP emission sources covered by the bubble limit are divided into three source categories:

1. Individual / Miscellaneous Plant-Wide Sources
2. Grind Operations
3. Starch Operations

PTO 5923 Attachments B and C specifies all emission units covered under the bubble limit and its designated source category. PTO Attachments B and C shall hereby become a part of these permit conditions by reference.

The following items are issued as permit conditions pursuant to the operation and compliance of this facility. These conditions are in addition to any specific permit conditions for individual sources.

Facility Operating Limits:
Sources covered under bubble limit shall comply with the following operational limits.

1. The facility shall be limited to a grind rate of 32,850,000 bushels (90,000 bushels/day) based on a 12-month rolling total.

2. The facility shall be limited to a dried starch production rate of 509,832 tons (58.2 ton/hour) based on a 12-month rolling total.

Authority for Requirement: LCPH ATI 6083 / PTO 5923

Facility "Bubble Limit" Recordkeeping Requirements:
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.

Note: This permit does not require the facility to track VOC and HAP emissions associated to each individual emission unit associated with the grind or starch operations; rather emissions will be calculated for the grind and starch sources included in the bubble limit as a whole. However, for HAP sources that are covered under individual / miscellaneous plant-wide category, individual tracking will be necessary.

Grind Operations:

Emission units categorized in PTO 5923 Attachment B as a "Grind Operation" shall comply with the following recordkeeping requirements.

1. Track on a monthly basis the total bushels of corn processed and apply it to a 12 month rolling sum for all emission units associated with "Grind Operations" as identified in Table A.

2. Calculate on a monthly basis the total VOC emissions associated to emission units categorized as "Grind Operations" and apply it to a 12-month rolling sum for all sources included under the bubble limit.

Starch Operations:

Emission units categorized in PTO 5923 Attachment B as "Starch Operations" shall comply with the following recordkeeping requirements.

1. Track on a monthly basis the total tons of starch dried and apply it to a 12 month rolling sum for all emission units associated with "Starch Operations" as identified in Table A.

2. Calculate on a monthly basis the total VOC emissions associated to emission units categorized as "Starch Operations" and apply it to a 12-month rolling sum for all sources included under the bubble limit.

HAP Sources (Grind, Starch, Individual / Miscellaneous Plant-wide Operations):

Emission units categorized in PTO 5923 Attachment C shall comply with the following recordkeeping requirements.

1. Calculate and record on a monthly basis the single HAP emission rate for all emission units categorized as "Miscellaneous plant-wide operations" identified in PTO 5923 Attachment C and apply it to a 12-month rolling sum for all sources included under the bubble limit. This is to begin with the first full month after permit issuance plus the previous 11-month totals.
2. Calculate and record on a monthly basis the total combined HAP emission rate for all emission sources categorized as "Miscellaneous plant-wide operations" identified in PTO 5923 Attachment C and apply it to a 12-month rolling sum for all sources included under the bubble limit. This is to begin with the first full month after permit issuance plus the previous 11-month totals.
3. Calculate and record on a monthly basis the single HAP emissions based on the total number of bushels processed and apply it to a 12-month rolling sum for all sources included under the bubble limit.
4. Calculate and record on a monthly basis the total HAP emissions based on the total number of bushels processed and apply it to a 12-month rolling sum for all sources included under the bubble limit.
5. Calculate and record on a monthly basis the single HAP emissions based on the total tons of starch dried and apply it to a 12-month rolling sum for all sources included under the bubble limit.
6. Calculate and record on a monthly basis the total HAP emissions based on the total tons of starch dried and apply it to a 12-month rolling sum for all sources included under the bubble limit.
7. When a single HAP emission rate (facility-wide) reaches 8 tons based on a 12-month rolling total, the facility will be required to track and record HAP emissions on a **daily** basis to ensure compliance with the requested minor limits. This is to occur each time the facility reaches this emissions level. Once the emissions fall below 8 tons, the facility can return to monitoring single HAP emissions and record on a monthly basis.
8. When the combination HAP emission rate (facility-wide) reaches 20 tons based on a 12-month rolling total, the facility will be required to track and record HAP emissions on a **daily** basis to ensure compliance with the requested minor limits. This is to occur each time the facility reaches this emissions level. Once the emissions fall below 20 tons, the facility can return to monitoring the combined VHAP emissions and record on a monthly basis.

Authority for Requirement: LCPH ATI 6083 / PTO 5923

Reporting:
The following information shall be submitted to this department by the 30th of each month for the previous quarter (January 30, April 30, July 30 and October 30).

1. Submit a quarterly report summarizing the facility's 12-month rolling sum for total VOC and HAP emissions. In addition, include the 12-month rolling sum totals for bushels ground and tons of starch produced during this period. The report shall be submitted by the 30th day of the month following the end of a quarter. (i.e.: Jan. 30th, April 30th, July 30th, Oct. 30th)

Authority for Requirement: LCPH ATI 6083 / PTO 5923

PTO 5923 Attachment B.

Penford Emission Unit #	Linn County Emission Point #	Emission Unit Description	VOC Emission Source Categories (Emission Tracking Requirements)	
			Grind Sources (Monthly)	Starch Sources (Monthly)
56S01	1	Storage Bin #1		ST-BUB
56S02	2	Storage Bin #2		ST-BUB
56S03	3	Storage Bin #3		ST-BUB
56S04	4	Storage Bin #4		ST-BUB
56S05	5	Storage Bin #5		ST-BUB
56S06	6	Storage Bin #6		ST-BUB
56S07	7	Storage Bin #7		ST-BUB

Penford Emission Unit #	Linn County Emission Point #	Emission Unit Description	VOC Emission Source Categories (Emission Tracking Requirements)	
			Grind Sources (Monthly)	Starch Sources (Monthly)
56S08	8	Storage Bin #8		ST-BUB
56S09	9	Storage Bin #9		ST-BUB
56S10	10	Storage Bin #10		ST-BUB
61W21	11	Pneumatic System - Dryer #1 Mixers to Scalping Reel		ST-BUB
61Z22	12	Scalping Reel - Dryer #1		ST-BUB
61W16	13	Vacuum System – Bldg 61		ST-BUB
61D11	15	Dryer #1		ST-BUB
61W31	18	Pneumatic System - Bins to Blender/Loadout #1		ST-BUB
61Z32	19	Blender #1		ST-BUB
61K39	20	Bulk Loadout #1		ST-BUB
61W34	21	Pneumatic System - Blender to Storage Bins		ST-BUB
61D73 61H73	23	Starch Flash Dryer #2 Starch Flash Dryer #2 Burner		ST-BUB
61W80	25	Pneumatic System - Loadout #3		ST-BUB
61K119	26	Bulk Loadout #3		ST-BUB
61D99-HEAT	30	Dryer #3 Heating Zone - North		ST-BUB
61W105	31	Pneumatic System - Dryer #3 Mixers to Scalping Reel		ST-BUB
61Z105	32	Scalping Reel - Dryer #3		ST-BUB
56S11	33	Storage Bin #11		ST-BUB
56S12	34	Storage Bin #12		ST-BUB
56S13	35	Storage Bin #13		ST-BUB
56S14	36	Storage Bin #14		ST-BUB
61M125	37	Supersacker Packaging		ST-BUB
61W115	38	Pneumatic System – Loadout #2		ST-BUB
61K40	39	Bulk Loadout #2		ST-BUB
61D99-COOL	42	Dryer #3 - Cooling Zone - South		ST-BUB
61W27	56	Pneumatic System – Bins to Packing		ST-BUB
57PK546001-2	57	Starch Packaging		ST-BUB
57BL545501	58	Pneumatic System – Bins to Packing		ST-BUB
57PK545501	59	Supersacker		ST-BUB
16BL71601	206	Vacuum System – Bldg 16	GR-BUB	
16-CONVEY&LOAD	207	House Dust Collector – Convey/Load/Transfer	GR-BUB	
05-GLUTF&VETP	251	Gluten Filters & Vetter Presses	GR-BUB	
05BL53001	255	Pneumatic System - Gluten Meal Recycle	GR-BUB	
05DR42004	261	Germ Rotary Tube Dryer #4 - Cooling	GR-BUB	
05DR42003	262	Germ Rotary Tube Dryer #3	GR-BUB	
05DR42002	263	Germ Rotary Tube Dryer #2	GR-BUB	
05DR42001	264	Germ Rotary Tube Dryer #1	GR-BUB	
05DR42005 05MS42001	265	Germ Predryer Germ Predryer (Natural Gas Combustion)	GR-BUB	
05VP52701	271	Vacuum Pump - #6 Gluten Filter	GR-BUB	
70DR54001 70MS54001	275	Gluten Meal Dryer Gluten Meal Dryer (Natural Gas	GR-BUB	

Penford Emission Unit #	Linn County Emission Point #	Emission Unit Description	VOC Emission Source Categories (Emission Tracking Requirements)	
			Grind Sources (Monthly)	Starch Sources (Monthly)
		Combustion)		
O5-PROCESS-TKS	279	Bldg 05 Process Tanks	GR-BUB	
08TANKS	290	Starch Slurry Tanks – Bldg 8	GR-BUB	
69Z02	403	Blender #2		ST-BUB
69Z482501	404	Blender #1		ST-BUB
69-LOADOUTMID	407	Bulk Loadout - Middle		ST-BUB
69W11	409	Pneumatic System – Dryer #11		ST-BUB
69W02	413	Pneumatic System – Blender #2 & Finish Bins		ST-BUB
69Z11	414	Scalping Reel – Dryer 11		ST-BUB
69BN490101	421	Storage Bin #1		ST-BUB
69BN490301	423	Storage Bin #3		ST-BUB
69BN490501	425	Storage Bin #5		ST-BUB
69BN490701	427	Storage Bin #7		ST-BUB
69BN490901	429	Storage Bin #9		ST-BUB
69BN491001	430	Storage Bin #10		ST-BUB
69BN491101	431	Storage Bin #11		ST-BUB
69D11	446	Dryer #11		ST-BUB
69D12	457	Dryer #12		ST-BUB
69W22	460	Vacuum System – Bldg 69		ST-BUB
69Z12	461	Scalping Reel – Dryer #12		ST-BUB
69W12	463	Pneumatic System – Dryer #12 to Scalping Reel		ST-BUB
69W05	464	Pneumatic System – ABC Storage Bins to Bldg 69		ST-BUB
69W16	465	Pneumatic System – ABC Bins to Bulk Loadout		ST-BUB
69W12A	466	Pneumatic System – Dryer #12 SR to Bins/Loadout		ST-BUB
69-LOADOUTEAST	467	Bulk Loadout - East		ST-BUB
69-LOADOUTWEST	468	Bulk Loadout - West		ST-BUB
69W01	469	Pneumatic System – Blender #1 & Finish Bins		ST-BUB
69K17A-B	472	Bulk Loadout Conveyor - North		ST-BUB
69K18A-B	473	Bulk Loadout Conveyor - South		ST-BUB
69T19-39	477	Tanks – Bldg 69		ST-BUB
77TANKS	478	Treating Tanks – Bldg 77 & 96		ST-BUB
95T100B	685	Reslurry Tank		ST-BUB
41	-	Starch Slurry Tank		ST-BUB
42	-	Starch Slurry Tank		ST-BUB
43-46	-	Starch Slurry Tank (combo)		ST-BUB
47	-	Dryers No. 1 - 2 Vacuum Pump		ST-BUB
48	-	Dryers No. 1 - 2 Vacuum Pump		ST-BUB
49	-	Dryer No. 3 Vacuum Pump		ST-BUB
50	-	Dryers No. 1 – 2 Vacuum Pump		ST-BUB
70	-	Evaporator Vacuum Pump		ST-BUB
266	-	No. 1 Gluten Filter Vacuum Pump	GR-BUB	
267	-	No. 2 Gluten Filter Vacuum Pump	GR-BUB	
268	-	No. 3 Gluten Filter Vacuum Pump	GR-BUB	

Penford Emission Unit #	Linn County Emission Point #	Emission Unit Description	VOC Emission Source Categories (Emission Tracking Requirements)	
			Grind Sources (Monthly)	Starch Sources (Monthly)
269	-	No. 4 Gluten Filter Vacuum Pump	GR-BUB	
270	-	No. 5 Gluten Filter Vacuum Pump	GR-BUB	
323	-	Vacuum Pump – B25		ST-BUB
435	-	Dryer No. 11 Vacuum Pump		ST-BUB
436	-	Dryer No. 12 Vacuum Pumps		ST-BUB
620	-	Starch Slurry		ST-BUB
621	-	Starch Slurry		ST-BUB
623	-	Vacuum Pump Discharge		ST-BUB

NOTE: Sources without Linn County EU ID's are either listed in Penford's Operating Permit under the Insignificant Units section or are fugitive in nature.

Legend: GR-BUB – Grind Bubble Source; ST-BUB – Starch Bubble Source.

PTO 5923 Attachment C.

Penford Emission Unit #	Linn County Emission Point #	Emission Unit Description	HAP Emission Source Categories (Emission Tracking Requirements)		
			Grind Sources (Monthly)	Starch Sources (Monthly)	Individual / Misc. Plant-Wide Sources (Monthly)
56S01	1	Storage Bin #1		ST-BUB	
56S02	2	Storage Bin #2		ST-BUB	
56S03	3	Storage Bin #3		ST-BUB	
56S04	4	Storage Bin #4		ST-BUB	
56S05	5	Storage Bin #5		ST-BUB	
56S06	6	Storage Bin #6		ST-BUB	
56S07	7	Storage Bin #7		ST-BUB	
56S08	8	Storage Bin #8		ST-BUB	
56S09	9	Storage Bin #9		ST-BUB	
56S10	10	Storage Bin #10		ST-BUB	
61W21	11	Pneumatic System - Dryer #1 Mixers to Scalping Reel		ST-BUB	
61Z22	12	Scalping Reel - Dryer #1		ST-BUB	
61W16	13	Vacuum System – Bldg 61		ST-BUB	
61D11	15	Dryer #1		ST-BUB	
61W31	18	Pneumatic System - Bins to Blender/Loadout #1		ST-BUB	
61Z32	19	Blender #1		ST-BUB	
61K39	20	Bulk Loadout #1		ST-BUB	
61W34	21	Pneumatic System - Blender to Storage Bins		ST-BUB	
61D73	23	Starch Flash Dryer #2		ST-BUB	
61W80	25	Pneumatic System - Loadout #3		ST-BUB	
61K119	26	Bulk Loadout #3		ST-BUB	
61D99-HEAT	30	Dryer #3 Heating Zone - North		ST-BUB	
61W105	31	Pneumatic System - Dryer #3 Mixers to Scalping Reel		ST-BUB	
61Z105	32	Scalping Reel - Dryer #3		ST-BUB	
56S11	33	Storage Bin #11		ST-BUB	
56S12	34	Storage Bin #12		ST-BUB	

Penford Emission Unit #	Linn County Emission Point #	Emission Unit Description	HAP Emission Source Categories (Emission Tracking Requirements)		
			Grind Sources (Monthly)	Starch Sources (Monthly)	Individual / Misc. Plant-Wide Sources (Monthly)
56S13	35	Storage Bin #13		ST-BUB	
56S14	36	Storage Bin #14		ST-BUB	
61M125	37	Supersacker Packaging		ST-BUB	
61W115	38	Pneumatic System – Loadout #2		ST-BUB	
61K40	39	Bulk Loadout #2		ST-BUB	
61D99-COOL	42	Dryer #3 - Cooling Zone - South		ST-BUB	
61W27	56	Pneumatic System – Bins to Packing		ST-BUB	
57PK546001-2	57	Starch Packaging		ST-BUB	
57BL545501	58	Pneumatic System – Bins to Packing		ST-BUB	
57PK545501	59	Supersacker		ST-BUB	
95-FUGITIVE	95	Ethanol Fugitives			OTHER
13PU095201	105	Fire Pump			OTHER
14TK140001-701	106	Main Fermentation Vent			OTHER
15TK160001	108	Stillage Tank			OTHER
15DISTILLATION	109	Distillation Vent			OTHER
15PU160102	110	Stillage Evaporator Vacuum Pump			OTHER
17TK210101	112	Off-Spec Storage Tank			OTHER
17TK210201	114	Anhydrous Ethanol Tank			OTHER
17TK210401	115	Gasoline Storage Tank			OTHER
17PU210601, 95PU210801, 17FL211501	117	Alcohol Loadout Flare			OTHER
25-VACUUMPUMPS	122	Vacuum Pumps			OTHER
95TK210501	123	Denatured Product Storage Tank			OTHER
95TK210601	124	Denatured Product Storage Tank			OTHER
16BL71601	206	Vacuum System – Bldg 16	GR-BUB		
16-CONVEY&LOAD	207	House Dust Collector – Convey/Load/Transfer	GR-BUB		
04-STEEPS&Mill	241	Steep & Surge Tanks & Millhouse Tanks			GR-IND
05-GLUTF&VETP	251	Gluten Filters & Vetter Presses	GR-BUB		
05BL53001	255	Pneumatic System - Gluten Meal Recycle	GR-BUB		
05DR042006	260	Germ Rotary Tube Dryer #6			GR-IND
05DR42004	261	Germ Rotary Tube Dryer #4 – Cooling	GR-BUB		
05DR42003	262	Germ Rotary Tube Dryer #3	GR-BUB		
05DR42002	263	Germ Rotary Tube Dryer #2	GR-BUB		
05DR42001	264	Germ Rotary Tube Dryer #1	GR-BUB		
05DR42005 05MS42001	265	Germ Predryer Germ Predryer (Natural Gas Combustion)	GR-BUB		
05VP52701	271	Vacuum Pump - #6 Gluten Filter	GR-BUB		
70DR54001 70MS54001	275	Gluten Meal Dryer Gluten Meal Dryer (Natural Gas Combustion)	GR-BUB		
05-PROCESS-TKS	279	Bldg 05 Process Tanks	GR-BUB		
08TANKS	290	Starch Slurry Tanks – Bldg 8	GR-BUB		

Penford Emission Unit #	Linn County Emission Point #	Emission Unit Description	HAP Emission Source Categories (Emission Tracking Requirements)		
			Grind Sources (Monthly)	Starch Sources (Monthly)	Individual / Misc. Plant-Wide Sources (Monthly)
95W01	299	Hydrocarbon Vapor Extraction System			OTHER
69Z02	403	Blender #2		ST-BUB	
69Z482501	404	Blender #1		ST-BUB	
69-LOADOUTMID	407	Bulk Loadout - Middle		ST-BUB	
69W11	409	Pneumatic System – Dryer #11		ST-BUB	
69W02	413	Pneumatic System – Blender #2 & Finish Bins		ST-BUB	
69Z11	414	Scalping Reel – Dryer 11		ST-BUB	
69BN490101	421	Storage Bin #1		ST-BUB	
69BN490301	423	Storage Bin #3		ST-BUB	
69BN490501	425	Storage Bin #5		ST-BUB	
69BN490701	427	Storage Bin #7		ST-BUB	
69BN490901	429	Storage Bin #9		ST-BUB	
69BN491001	430	Storage Bin #10		ST-BUB	
69BN491101	431	Storage Bin #11		ST-BUB	
69D11	446	Dryer #11		ST-BUB	
69D12	457	Dryer #12		ST-BUB	
69W22	460	Vacuum System – Bldg 69		ST-BUB	
69Z12	461	Scalping Reel – Dryer #12		ST-BUB	
69W12	463	Pneumatic System – Dryer #12 to Scalping Reel		ST-BUB	
69W05	464	Pneumatic System – ABC Storage Bins to Bldg 69		ST-BUB	
69W16	465	Pneumatic System – ABC Bins to Bulk Loadout		ST-BUB	
69W12A	466	Pneumatic System – Dryer #12 SR to Bins/Loadout		ST-BUB	
69-LOADOUTEAST	467	Bulk Loadout - East		ST-BUB	
69-LOADOUTWEST	468	Bulk Loadout - West		ST-BUB	
69W01	469	Pneumatic System – Blender #1 & Finish Bins		ST-BUB	
69K17A-B	472	Bulk Loadout Conveyor - North		ST-BUB	
69K18A-B	473	Bulk Loadout Conveyor - South		ST-BUB	
69T19-39	477	Treating Tanks – Bldg 69		ST-BUB	
77TANKS	478	Tanks – Bldg 77 & 96		ST-BUB	
97-REACTORS-EO 97-REACTORS-PO 97-TANK	480	EO Reactors PO Reactors Starch Tank			ST-IND
68T51-52 68T25	481	Treating Tanks – Bldg 68 SBS Tank			ST-IND
65BO201001	521	Boiler #1			OTHER
65BO202001	522	Boiler #2			OTHER
65BO203002	524A	Boiler #3			OTHER
94-UNLOADHCL 94-UNLOADAA 95T097201	582	HCl Unload & Storage & AA/AdA Unload & Storage			ST-IND

Penford Emission Unit #	Linn County Emission Point #	Emission Unit Description	HAP Emission Source Categories (Emission Tracking Requirements)		
			Grind Sources (Monthly)	Starch Sources (Monthly)	Individual / Misc. Plant-Wide Sources (Monthly)
95T100B	685	Reslurry Tank		ST-BUB	
67DR619001	741	Starch Spray Dryer			OTHER
67-R&D	752	R&D Scrubber			OTHER
41	-	Starch Slurry Tank		ST-BUB	
42	-	Starch Slurry Tank		ST-BUB	
43-46	-	Starch Slurry Tank (combo)		ST-BUB	
47	-	Dryers No. 1 - 2 Vacuum Pump		ST-BUB	
48	-	Dryers No. 1 - 2 Vacuum Pump		ST-BUB	
49	-	Dryer No. 3 Vacuum Pump		ST-BUB	
50	-	Dryers No. 1 – 2 Vacuum Pump		ST-BUB	
70	-	Evaporator Vacuum Pump		ST-BUB	
266	-	No. 1 Gluten Filter Vacuum Pump	GR-BUB		
267	-	No. 2 Gluten Filter Vacuum Pump	GR-BUB		
268	-	No. 3 Gluten Filter Vacuum Pump	GR-BUB		
269	-	No. 4 Gluten Filter Vacuum Pump	GR-BUB		
270	-	No. 5 Gluten Filter Vacuum Pump	GR-BUB		
323	-	Vacuum Pump – B25		ST-BUB	
435	-	Dryer No. 11 Vacuum Pump		ST-BUB	
436	-	Dryer No. 12 Vacuum Pumps		ST-BUB	
620	-	Starch Slurry		ST-BUB	
621	-	Starch Slurry		ST-BUB	
623	-	Vacuum Pump Discharge		ST-BUB	

NOTE: Sources without Linn County EU ID's are either listed in Penford's Operating Permit under the Insignificant Units section or are fugitive in nature.

Legend: GR-BUB – Grind Bubble Source; ST-BUB – Starch Bubble Source; ST-IND – Starch sources which emits HAP and its emissions are calculated with a source specific emission factor; GR-IND – Grind source which emits HAP and its emissions are calculated with a source specific emission factor; OTHER – HAP-emitting source which is not considered a Grind or Starch source, however its emissions count towards the overall plant-wide HAP emission limits.

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 95

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
95	95-FUGITIVE	Ethanol Fugitives	Ethanol	--	--	--

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
95	VOC	9.8 tpy	LCPH ATI 5991 / PTO 5678
	SHAP	9.4 tpy [(1)]	
	THAP	24.4 tpy [(1)]	

[(1)] Plant-wide limit to remain minor for 112(g)

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

NSPS Applicability:
This unit is subject to NSPS Subpart A, General Provisions and Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing.
Authority for Requirement: LCPH ATI 5991 / PTO 5678

Operating Limits:
A. The facility shall document the number and type of all equipment, as defined in NSPS Subpart VV 40 CFR §60.481.
B. This facility shall comply with the requirements of NSPS subpart VV by meeting the standards of 40 CFR §60.482-1 through 40 CFR §60.485.
Authority for Requirement: LCPH ATI 5991 / PTO 5678

Operating Condition Monitoring and Record keeping:
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 facility shall maintain records of the VOC emissions from all equipment, as defined in NSPS Subpart VV 40 CFR §60.481, plant-wide and update the twelve-month rolling total on a monthly basis. Emission factors shall be based on EPA document 453-R-95-017 titled Protocol for Equipment Leak Emission Estimates.
B. Recordkeeping for NSPS Subpart VV shall be done according to 40 CFR §60.486.
C. Reporting for NSPS Subpart VV shall be done according to 40 CFR §60.487.
Authority for Requirement: LCPH ATI 5991 / PTO 5678

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 105

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
105	13PU095201	Fire Pump	Diesel Fuel	288 hp-hr/hr (14.5 gph)	--	--

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
105	PM/PM_{10}	0.21 lb/hr	LCPH ATI 5567 / PTO 5468
	SHAP	9.4 tpy [(1)]	
	THAP	24.4 tpy [(1)]	

[(1)] Plant-wide limit to remain minor for 112(g)

NSPS Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
105	PM	0.40 g/HP-hr	LCPH ATI 5567 / PTO 5468 40 CFR §60.4205(c)
	CO	2.6 g/HP-hr	LCPH ATI 5567 / PTO 5468 40 CFR §60.4205(c)
	NO_x + NMHC	7.8 g/HP-hr	LCPH ATI 5567 / PTO 5468 40 CFR §60.4205(c)

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
105	Opacity	20%	LCPH ATI 5567 / PTO 5468 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5567 / PTO 5468 567 IAC 23.3(2)"a"(1) LCO 10.9(1)"a"
		0.6 lb/MMBtu	567 IAC 23.3(2)(b)"2" LCO 10.8(2)"a"
	SO_2	1.5 lb/MMBtu	LCPH ATI 5567 / PTO 5468 LCO 10.12(1)"c"

Operational Limits & Requirements

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

NSPS Applicability:

A. The New Source Performance Standards (NSPS) Subpart A, General Provisions and Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines shall apply to this source pursuant to LCO 10.9(2)"77" and 567 IAC 23.1(2)"yyy".

Authority for Requirement: LCPH ATI 5567 / PTO 5468

NESHAP Applicability:

A. The National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines shall apply to this source pursuant to LCO 10.9(4)"zzzz" and 567 IAC 23.1(4)"cz".

Authority for Requirement: LCPH ATI 5567 / PTO 5468

Operating Limits:

A. The fire pump shall be fired by diesel fuel #1 or #2 only.
B. The sulfur content of all diesel fuel used in the fire pump shall not exceed 0.5% by weight.
C. The fire pump shall operate no more than 1,000 hours per 12-month rolling period.
D. Per 40 CFR §60.4211(a), the owner or operator must maintain the stationary CI internal combustion engine according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. The owner or operator must also meet the requirements of 40 CFR parts 89, 94, and/or 1068, as applicable.
E. Per 40 CFR §60.4211(e), owners and operators of emergency engines meeting standards under 40 CFR §60.4205, but not 40 CFR §60.4204, any operation other than emergency operation and maintenance and testing is prohibited. Maintenance checks and readiness testing of the fire pump is limited to a maximum of 100 hours per rolling 12-month period.
F. The owner or operator shall meet the fuel requirements specified in 40 CFR §60.4207.
G. Per 40 CFR §60.4209, the owner or operator shall meet the monitoring requirements specified in 40 CFR §60.4211 and install a non-resettable hour meter prior to startup of the fire pump.

Authority for Requirement: LCPH ATI 5567 / PTO 5468

Operating Condition Monitoring and Record keeping:

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 sulfur content of all fuel used in the fire pump in weight percent.
B. Record the number of hours the fire pump is operated each month and the reason the fire pump was operated. Calculate and record 12-month rolling totals.
C. The owner or operator shall complete all recordkeeping and monitoring as required by NSPS Subpart III.
    a. The owner or operator of the fire pump shall follow the monitoring requirements of 40 CFR §60.4209.
    b. The owner or operator of the fire pump shall follow the compliance requirements of 40 CFR §60.4211.
    c. The owner or operator of the fire pump shall follow the notification, reporting, and recordkeeping requirements of 40 CFR §60.4214(b).

Authority for Requirement: LCPH ATI 5567 / PTO 5468

<u>Emission Point Characteristics</u>

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
105	5567 / 5468	3	H	3	952	1632

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 106, 109

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
106	14TK140001-701	Main Fermentation Vent	Ethanol	50 MMgal/yr	14SR140901	Scrubber
109	15DISTILLATION	Distillation Vent	Ethanol	50 MMgal/yr	15SR150401	Scrubber

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
106	VOC	4.25 lb/hr; 18.69 tpy	LCPH ATI 5255 / PTO 5959
109	VOC	0.61 lb/hr; 2.67 tpy	LCPH ATI 5875 / PTO 5671
	SO_2	500 ppmv	LCPH ATI 5875 / PTO 5671 LCO 10.12(2) 567 IAC 23.3(3)"e"
106,109	SHAP	9.4 tpy [(1)]	LCPH ATI 5255 / PTO 5959
	THAP	24.4 tpy [(1)]	LCPH ATI 5875 / PTO 5671

[(1)] Plant-wide limit to remain minor for 112(g)

Operational Limits & Requirements

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

Control Device:

A packed bed scrubber shall be installed to control VOC 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control equipment (device) at all times.
Authority for Requirement: LCPH ATI 5255 / PTO 5959; LCPH ATI 5875 / PTO 5671

NSPS Applicability:

A. The New Source Performance Standards (NSPS) Subpart A, General Provisions and Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing shall apply to this source pursuant to LCO 10.9(2)"40" and 567 IAC 23.1(2)"nn".

Authority for Requirement: LCPH ATI 5255 / PTO 5959; LCPH ATI 5875 / PTO 5671

Operating Limits:

A. This facility is limited to a maximum production of 50 x 10^6 gallons of anhydrous alcohol per 12-month rolling period. **(EP 106 only)**
B. This owner or operator shall comply with the requirements of 40 CFR §§60.1-19 [NSPS Subpart A] to comply with LCO 10.9(2).
C. The owner or operator shall comply with the requirements of NSPS subpart VV by meeting the standards of 40 CFR §60.482-1 through 40 CFR §60.485 to comply with LCO 10.9(2)(40).
D. The scrubber on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
E. The fresh water flow rate in the scrubber shall be no less than 40 gpm during normal operation. At reduced rates (< 100 gpm glucose feed) the fresh water flow rate in the scrubber shall be no less than 27 gpm.[(1)] **(EP 106 only)**

F. The normal differential pressure across the scrubber shall be maintained between 0.5" to 6.0" w.c.[2] **(EP 106 only)**
G. The fresh water flow rate in the scrubber shall be no less than 4 gpm during normal operation. At reduced rates (< 43 gpm anhydrous ethanol) the fresh water flow rate in the scrubber shall be no less than 2.9 gpm. **(EP 109 only)**
H. The normal differential pressure across the scrubber shall be maintained between 0.5" to 4.0" w.c.[3] **(EP 109 only)**

[1] When the glucose feed is less than 32 gpm and fermentation has reduced such that the differential pressure is 0.7 in w.c. or less, the fresh water flow rate in the scrubber shall be no less than 10 gpm.

[2]If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This operating limit does not apply during periods of startup, shutdown, cleaning of control equipment, or at reduced operating rates (less than 100 gpm glucose feed).

[3] If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This operating limit does not apply during periods of startup, shutdown, cleaning of control equipment, or at reduced operating rates (less than 43 gpm anhydrous ethanol production rate).

Authority for Requirement: LCPH ATI 5255 / PTO 5959; LCPH ATI 5875 / PTO 5671

Operating Condition Monitoring and Record keeping:
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 comply with then notification and record keeping requirements of NSPS Subpart A pursuant to 40 CFR §60.7.
B. The owner or operator shall comply with the recordkeeping requirements of NSPS Subpart VV pursuant to 40 CFR §60.486.
C. The owner or operator shall comply with the reporting requirements of NSPS Subpart VV pursuant to 40 CFR §60.487.
D. The owner or operator shall record the amount of anhydrous alcohol produced. Calculate and record monthly and 12-month rolling totals. **(EP 106 only)**
E. The owner or operator shall maintain a record of all maintenance completed on the control device.
F. The owner or operator shall monitor and record the differential pressure on a weekly basis.
G. The owner or operator shall monitor and record the fresh water flow rate in the scrubber on a weekly basis.

Authority for Requirement: LCPH ATI 5255 / PTO 5959; LCPH ATI 5875 / PTO 5671

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
106	5567 / 5959	80	V	17.5	60	6100 5900 dscfm
109	5875 / 5671	71.4	V	3	50	60

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design

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

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

Stack Testing:
Pollutant – VOC
1st Stack Test to be Completed by – As outlined in PTO 5959[(1)]
Test Method – Method 18
Authority for Requirement: LCPH ATI 5255 / PTO 5959

[(1)] Performance testing for VOC shall be conducted semiannually for at least 2 years with a minimum of at least 3 months between each testing periods. If after 2 years, the results of each test are less than 90% of the appropriate emission limitation, testing for VOC may be suspended. If a semi-annual test exceeds 90% of appropriate emission limitation, then testing must continue to be conducted semiannually until 4 consecutive tests are less than 90% of the appropriate emissions limitation. If 2 consecutive tests are less than 80% of the applicable emission limitation then no further testing is required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: VOC **(EP 109 only)**
See Plant-Wide Monitoring Section for Agency O & M Plan.

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

Compliance Assurance Monitoring (CAM) Plan Required?[(1)] **Yes** ☒ **No** ☐
[(1)] CAM plan is required for EP 106 only.

Compliance Assurance Monitoring (CAM) Plan for EP106

I. Background

D. Emissions Unit
Facility: Penford Products Co., Cedar Rapids, Iowa
Description: Main Fermentation Vent
Identification: EU14TK140001-701

E. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: LCPH PTO 5959
Emission Limit: VOC: 4.25 lb/hr
Monitoring Requirements: scrubber water flow rate

F. Control Technology
Description: Packed Bed Scrubber (CE14SR140901)

II. Monitoring Approach

E. Indicator
scrubber water flow rate

F. Indicator Range
Minimum of 40 gallons per minute during normal operation.
Minimum of 27 gallons per minute at reduced operation (<100 gpm glucose feed).
Minimum of 10 gallons per minute during sustain-mode operation (<32 gpm glucose feed, dP <0.7 in w.c.).
An excursion is defined as an hourly average (60 minute) scrubber water flow rate less than the indicator range.

G. Measurement Approach
Flow rate measurement using flow meter.

H. Performance Criteria

Data Representativeness:	The fresh water flow rate is measured in the inlet piping to the scrubber.
Verification of Operational Status:	Emission unit operation is verified at the time of measurement. Records of water flow rate readings will be maintained for five years.
QA/QC Practices and Criteria:	Flow meter will be maintained per the manufacturer's specifications.
Monitoring Frequency:	Water flow rate is measured continuously and recorded via data acquisition system. The scrubber water flow rate measurement and record will be made daily during a period when the emission unit is in operation.
Data Collection Procedures:	The scrubber water flow rate will be recorded on the air monitoring form (which may be electronic record in the future). If the DAS display (real-time) is outside the indicator range, the hourly average flow rate (sixty 1-minute readings) will be calculated and recorded.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 108

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
108	15TK160001	Stillage Tank	Stillage	419,630 gallons	--	--

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
108	SHAP	9.4 tpy [1]	LCPH ATI 5264 / PTO 5516
	THAP	24.4 tpy [1]	

[1] Plant-wide limit to remain minor for 112(g)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

		Stack Characteristics				
EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
108	5264 / 5516	32	V	8	176	PD

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 110

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
110	15PU160102	Vacuum Pump – Stillage Evaporator	Air/Filtrate Water	50 MMgal/yr	--	--

Applicable Requirements

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

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

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
110	VOC	0.1 lb/hr; 0.44 tpy	LCPH ATI 5257 / PTO 5517
	SHAP	9.4 tpy [(1)]	
	THAP	24.4 tpy [(1)]	

[(1)] Plant-wide limit to remain minor for 112(g)

Operational Limits & Requirements

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

NSPS Applicability:

A. This unit is subject to NSPS Subpart A, General Provisions and Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing.

Authority for Requirement: LCPH ATI 5257 / PTO 5517

Operating Limits:

A. This facility shall comply with the requirements of NSPS subpart VV by meeting the standards of 40 CFR §60.482-1 through 40 CFR §60.485.

Authority for Requirement: LCPH ATI 5257 / PTO 5517

Operating Condition Monitoring and Record keeping:

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. Recordkeeping for NSPS Subpart VV shall be done according to 40 CFR §60.486.
B. Reporting for NSPS Subpart VV shall be done according to 40 CFR §60.487.

Authority for Requirement: LCPH ATI 5257 / PTO 5517

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
110	5257 / 5517	40	V	3	120	24

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 112, 114, 115, 123, 124

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
112	17TK210101	Storage Tank – Off-Spec Ethanol	Ethanol	115,500 gallons	17TK210101	Internal Floating Roof
114	17TK210201	Storage Tank – Anhydrous Ethanol	Ethanol	424,480 gallons	17TK210201	Internal Floating Roof
115	17TK210401	Storage Tank – Gasoline	Denaturant	46,998 gallons	17TK210401	Internal Floating Roof
123	95TK210501	Storage Tank – Denatured Product	Ethanol	25,220 gallons	95TK210501	Internal Floating Roof
124	95TK210601	Storage Tank – Denatured Product	Ethanol	25,220 gallons	95TK210601	Internal Floating Roof

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
112	VOC	0.09 tpy	LCPH ATI 5258 / PTO 5518
114	VOC	0.21 tpy	LCPH ATI 5259 / PTO 5519
115	VOC	1.0 tpy	LCPH ATI 5353 / PTO 5511
123	VOC	0.65 tpy	LCPH ATI 5355 / PTO 5512
124	VOC	0.65 tpy	LCPH ATI 5356 / PTO 5513
112,114, 115, 123, 124	SHAP	9.4 tpy (1)	LCPH ATI 5258 / PTO 5518 LCPH ATI 5259 / PTO 5519 LCPH ATI 5353 / PTO 5511 LCPH ATI 5355 / PTO 5512 LCPH ATI 5356 / PTO 5513
	THAP	24.4 tpy (1)	

(1) Plant-wide limit to remain minor for 112(g)

Operational Limits & Requirements

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

Control Device:

An internal floating roof shall be installed to control VOC 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5258 / PTO 5518; LCPH ATI 5259 / PTO 5519
LCPH ATI 5353 / PTO 5511; LCPH ATI 5355 / PTO 5512
LCPH ATI 5356 / PTO 5513

NSPS Applicability:

This unit is subject to NSPS Subpart A, General Provisions, Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing and 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.

Authority for Requirement: LCPH ATI 5258 / PTO 5518; LCPH ATI 5259 / PTO 5519

LCPH ATI 5353 / PTO 5511; LCPH ATI 5355 / PTO 5512
LCPH ATI 5356 / PTO 5513

Operating Limits:

A. This facility shall comply with the requirements of NSPS subpart VV by meeting the standards of 40 CFR §60.482-1 through 40 CFR §60.485.
B. This facility shall comply with the requirements of NSPS Subpart Kb by meeting the standards of 40 CFR §60.112b and the testing and procedures of 40 CFR §60.113b.
C. Total denaturant usage shall not exceed 15,000,000 gallons per 12-month rolling period. **(EP 115 only)**

Authority for Requirement: LCPH ATI 5258 / PTO 5518; LCPH ATI 5259 / PTO 5519
LCPH ATI 5353 / PTO 5511; LCPH ATI 5355 / PTO 5512
LCPH ATI 5356 / PTO 5513

Operating Condition Monitoring and Record keeping:

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. Recordkeeping for NSPS Subpart VV shall be done according to 40 CFR §60.486.
B. Reporting for NSPS Subpart VV shall be done according to 40 CFR §60.487.
C. Recordkeeping for NSPS Subpart Kb shall be done according to 40 CFR §60.115b and 40 CFR §60.116b.
D. Reporting for NSPS Subpart Kb shall be done according to 40 CFR §60.115b.
E. Record the amount of denaturant loaded out. Calculate and record monthly and 12-month rolling totals. **(EP 115 only)**

Authority for Requirement: LCPH ATI 5258 / PTO 5518; LCPH ATI 5259 / PTO 5519
LCPH ATI 5353 / PTO 5511; LCPH ATI 5355 / PTO 5512
LCPH ATI 5356 / PTO 5513

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
112	5258 / 5518	30	4 Horizontal Vents	20	Ambient	PD
114	5259 / 5519	44	5 Horizontal Vents	20	Ambient	PD
115	5353 / 5511	24	4 Horizontal Vents	20	Ambient	PD
123	5355 / 5512	22.5	4 Horizontal Vents	20 (each)	Ambient	PD
124	5356 / 5513	22.5	4 Horizontal Vents	20	Ambient	PD

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 117

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
117	17FL211501	Flare	Natural Gas	0.005 mmcf/hr	17FL211501	Flare
	17PU210601	Railcar Loading	Denatured Ethanol	54,000 gallons/hr		
	95PU210801	Truck Loading	Denatured Ethanol	54,000 gallons/hr		
	95PRESSURETEST	Railcar Pressure Test	Denatured Ethanol	2 tests/hr		

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
117	Opacity	No VE	40 CFR §60.18(c)(1) LCPH ATI 6275 / PTO 6076
	VOC	5.46 lb/hr; 3.3 tpy	LCPH ATI 6275 / PTO 6076
	SHAP	9.4 tpy [(1)]	LCPH ATI 6275 / PTO 6076
	THAP	24.4 tpy [(1)]	

[(1)] Plant-wide limit to remain minor for 112(g)

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

Control Device:
A flare shall be installed to control VOC 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6275 / PTO 6076

NSPS Applicability:
A. The New Source Performance Standards (NSPS) *[A – General Provisions and VV – Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing]* shall apply to this source pursuant to LCO 10.9(2)*[40]* and 567 IAC 23.1(2)*[nn].*
Authority for Requirement: LCPH ATI 6275 / PTO 6076

NESHAP Applicability:
A. The National Emission Standards for Hazardous Air Pollutants (NESHAP) *[A – General Provisions and BBBBBB – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities]* shall apply to this source pursuant to LCO 10.9(4)[bbbbbb] and 567 IAC 23.1(4)[eb].
Authority for Requirement: LCPH ATI 6275 / PTO 6076

Operating Limits:

A. This facility is limited to a maximum production of 50 x 10^6 gallons of anhydrous alcohol per 12-month rolling period.
B. This facility shall comply with the requirements of NSPS subpart VV by meeting the standards of 40 CFR §60.482-1 through 40 CFR §60.485.
C. Total denaturant usage shall not exceed 15,000,000 gallons per 12-month rolling period.
D. The flare shall be designed and operated to meet the minimum requirements of 40 CFR §60.18(b) through §60.18(f).
E. This flare shall use only natural gas or propane as the auxiliary fuel.
F. This facility shall maintain the control equipment according to manufacturer's specifications and maintenance schedule.
G. Total E85 loadout shall not exceed 23,400,000 gallons per 12-month rolling period.
H. This facility shall comply with NSPS Subpart A by meeting all applicable requirements of 40 CFR §60.1 through §60.19.
I. This facility shall comply with NESHAP Subpart A by meeting all applicable requirements of 40 CFR §63.1 through §63.16 as identified in Table 3 referenced in 40 CFR §63.11082.
J. This facility shall comply with NESHAP Subpart BBBBBB by meeting the applicable requirements of 40 CFR §§63.63.11087 through 63.11092 for bulk gasoline terminals.
K. Daily gasoline throughput shall be less than 250,000 gallons per day. This shall be the amount of all gasoline and gasoline blends greater than 10% gasoline into cargo tanks.

Authority for Requirement: LCPH ATI 6275 / PTO 6076

Operating Condition Monitoring and Record keeping:
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. Recordkeeping for NSPS Subpart VV shall be done according to 40 CFR §60.486.
B. Reporting for NSPS Subpart VV shall be done according to 40 CFR §60.487.
C. The facility shall monitor the presence of the pilot flame and other parameters of the flare according to the provisions of 40 CFR §60.18. Loadout operations shall be discontinued anytime the pilot flame is out as required in 40 CFR §60.18(e).
D. Record the amount of anhydrous alcohol loaded out. Calculate and record both a monthly total and 12-month rolling total to demonstrate compliance with Condition 15A.
E. Record the amount of denaturant loaded out daily to demonstrate compliance with Condition 15K. Calculate and record both a monthly total and 12-month rolling total to demonstrate compliance with Condition 15C.
F. 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 findings and corrective action taken.
G. Record the amount of E85 loaded out. Calculate and record both a monthly total and 12-month rolling total to demonstrate compliance with Condition 15G.
H. Record the daily quantity of gasoline and gasoline blends loaded into cargo tank.
I. Notifications for NESHAP Subpart BBBBBB shall be done according to 40 CFR §63.11093.
J. Recordkeeping for NESHAP Subpart BBBBBB shall be done according to 40 CFR §63.11094.
K. Reporting for NESHAP Subpart BBBBBB shall be done according to 40 CFR §63.11095.

Authority for Requirement: LCPH ATI 6275 / PTO 6076

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
117	6275 / 6076	24	V	48	1400	2567 (scfm)

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 118, 119

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
118	13CT400001	Cooling Tower – Bldg 13	Water	840,000 gals/hr	13CT400001	Mist Eliminator
119	25CT400101	Cooling Tower – Bldg 25	Water	126,000 gals/hr	25CT400101	Mist Eliminator

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
118	PM/PM_{10}	1.23 lb/hr	LCPH ATI 5262 / PTO 5947
119	PM/PM_{10}	0.18 lb/hr	LCPH ATI 5263 / PTO 5948

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
118, 119	Opacity	20%	LCPH ATI 5262 / PTO 5947 LCPH ATI 5263 / PTO 5948 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5262 / PTO 5947 LCPH ATI 5263 / PTO 5948 567 IAC 23.3(2)"a"(1) LCO 10.9(1)"a"

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

Control Device:
A drift eliminator shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 5262 / PTO 5947; LCPH ATI 5263 / PTO 5948

Operating Limits:
A. Chromium based water treatment chemicals shall not be used in this emission unit.
B. The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 3,500 parts per million by weight (3,500 mg/L) for any single sampling event.
Authority for Requirement: LCPH ATI 5262 / PTO 5947; LCPH ATI 5263 / PTO 5948

Operating Condition Monitoring and Record keeping:
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. Maintain a material safety data sheet of all water treatment chemicals used.
B. Maintain records of the manufacturer's design guarantee.

C. Continuously monitor conductivity of water and record TDS at least once for each calendar month the cooling tower is in operation.

Authority for Requirement: LCPH ATI 5262 / PTO 5947; LCPH ATI 5263 / PTO 5948

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
118	5262 / 5947	35	V	288 per cell (2 cells)	85	1353656
119	5263 / 5948	69	V	144	85	206630

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 121

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
121	85S01	Soda Ash Storage Bin	Sodium Carbonate	4.82 tph	85Y01	BH-BV

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.

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
121	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(1) LCO 10.9(1)"a"

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 122

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
122	25-VACUUMPUMPS	Vacuum Pumps	Air/Filtrate Water	143 lb/hr	--	--

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement
122	SO_2	500 ppmv	LCPH ATI 5992 / PTO 5938 LCO 10.12(2) 567 IAC 23.3(3)"e"
	VOC	0.07 lb/hr	LCPH ATI 5992 / PTO 5938
	SHAP	9.4 tpy [(1)]	
	THAP	24.4 tpy [(1)]	

[(1)] Plant-wide limit to remain minor for 112(g)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
122	5992 / 5938	64	Downward	3	120	70

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 206, 207

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
206	16BL71601	Vacuum System – Bldg 16	Corn By-Products	105 tph	16BH66003	BH-FR
207	16-CONVEY& LOAD	House Dust Collector – Convey/Load/Transfer	Corn By-Products	30 tph	16BH71601	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
206	PM/PM_{10}	0.16 lb/hr	LCPH ATI 5872 / PTO 5646
207	PM/PM_{10}	2.41 lb/hr	LCPH ATI 5873 / PTO 5647

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
206,207	Opacity	20%	LCPH ATI 5872 / PTO 5646 LCPH ATI 5873 / PTO 5647 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5872 / PTO 5646 LCPH ATI 5873 / PTO 5647 567 IAC 23.4(7) LCO 10.9(1)"g"

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

Authority for Requirement: LCPH ATI 5872 / PTO 5646; LCPH ATI 5873 / PTO 5647

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 maintained between 0.4" and 8.0" w.c. **(EP 206)** [(1)]
C. The differential pressure across the baghouse shall be maintained between 0.6" and 9.0" w.c. **(EP 207)** [(1)]

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 5872 / PTO 5646; LCPH ATI 5873 / PTO 5647

Operating Condition Monitoring and Record keeping:
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 the differential pressure across the control device on a weekly basis.
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 maintain a record of all maintenance completed on the control device.
Authority for Requirement: LCPH ATI 5872 / PTO 5646; LCPH ATI 5873 / PTO 5647

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
206	5872 / 5646	97.2	V	8	180	2319
207	5873 / 5647	107	V	37.08	90	30015

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM **(EP 206 only)**
See Plant-Wide Monitoring Section for Agency O & M Plan.

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

Compliance Assurance Monitoring (CAM) Plan Required?[1] **Yes** ☒ **No** ☐
[1] CAM plan is required for EP's 207 only.
Authority for Requirement: 567 IAC 22.108(3)

Compliance Assurance Monitoring (CAM) Plan for EP207

I. Background

A. Emissions Unit
Facility: Penford Products Co., Cedar Rapids, Iowa
Description: House Dust Collector - Convey/Load/Transfer Byproducts
Identification: EU16-CONVEY&LOAD

B. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: LCPH PTO 5647

Emission Limit:	PM: 2.41 lb/hr, 0.1 gr/dscf PM10: 2.41 lb/hr
Opacity emission limit:	20%
Monitoring Requirement:	differential pressure readings

C. Control Technology
Description: Baghouse (CE16BH71601)

II. Monitoring Approach

A. Indicator
Differential pressure across the baghouse.

B. Indicator Range
Minimum of 0.6 in w.c., except during startup, shutdown, cleaning of control equipment, or immediately after new bags are installed.
An excursion is defined as an hourly average (60 minute) differential pressure reading that is less than the indicator range.

C. Measurement Approach
Differential pressure measurement using pressure gauge.

D. Performance Criteria

Data Representativeness:	Differential pressure is measured across the baghouse.
Verification of Operational Status:	Emission unit operation is verified at the time of measurement. Records of differential pressure readings will be maintained for five years.
QA/QC Practices and Criteria:	Pressure gauge will be maintained per the manufacturer's specifications.
Monitoring Frequency:	Differential pressure is measured continuously and recorded via data acquisition system. The differential pressure measurement and record will be made daily during a period when the emission unit is in operation.
Data Collection Procedures:	The differential pressure will be recorded on the air monitoring form (which may be electronic record in the future). If the DAS display (real-time) is outside the indicator range, the hourly average flow rate (sixty 1-minute readings) will be calculated and recorded.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 241

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
241	04-STEEPS&MILL	Steep & Surge Tanks & Millhouse Tanks	Steeped Corn	135 tph (112,000 BPD)	04SR70402	Scrubber - Alkaline
					04SR070403	Scrubber - Water

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
241	SO_2	0.55 lb/hr	LCPH ATI 6098 / PTO 5919
	VOC	8.42 lb/hr	
	SHAP	9.4 tpy [1]	
	THAP	24.4 tpy [1]	

[1] Plant-wide limit to remain minor for 112(g)

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
241	SO_2	500 ppmv	LCPH ATI 6098 / PTO 5919 LCO 10.12(2) 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Control Device:

Two packed bed scrubbers shall be installed to control sulfur dioxide and 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 Record keeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6098 / PTO 5919

Operating Limits:

A. CE04SR70402 and CE04SR70403 on EU04-STEEP&MILL shall be maintained according to the manufacturer's specifications and good operating practices.
B. The recirculation water flow rate in CE04SR70402 shall be ≥ 270 gpm.
C. The pH of the scrubbing liquid in CE04SR70402 shall be ≥ 11.8.
D. The normal pressure differential across CE04SR70402 shall be maintained between 0.5" to 6.0" w.c.[1]
E. The fresh water flow rate in CE04SR70403 shall be ≥ 85 gpm.
F. The normal pressure differential across CE04SR70403 shall be maintained between 0.5" to 7.0" w.c.[1]

[1] If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This operating limit does not apply during periods of startup, shutdown, or cleaning of control equipment.
Authority for Requirement: LCPH ATI 6098 / PTO 5919

Operating Condition Monitoring and Record keeping:
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 the recirculation water flow rate in CE04SR70402 on a daily basis.
B. The owner or operator shall monitor and record the pH of the scrubbing liquid in CE04SR70402 on a daily basis.
C. The owner or operator shall monitor and record the pressure differential across CE04SR70402 and CE04SR70403 on a daily basis.
D. The owner or operator shall monitor and record the fresh water flow rate in CE04SR70403 on a daily basis.
E. The owner or operator shall maintain a record of all maintenance completed on CE04SR70402 and CE04SR70403.

Authority for Requirement: LCPH ATI 6098 / PTO 5919

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
241	6098 / 5919	79.2	V	42	80	21000

The temperature and flow rates are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Pollutant – VOC
1st Stack Test to be Completed by – As outlined in PTO 5919[(1)]
Test Method – Method 18
Authority for Requirement: LCPH ATI 6098 / PTO 5919

[(1)] Performance testing for VOC shall be conducted semiannually for at least 2 years with a minimum of at least 3 months between each testing periods. If after 2 years, the results of each test are less than 90% of the appropriate emission limitation, testing for VOC may be suspended. If a semi-annual test exceeds 90% of appropriate emission limitation, then testing must continue to be conducted semiannually until 4 consecutive tests are less than 90% of the appropriate emissions limitation. If 2 consecutive tests are less than 80% of the applicable emission limitation then no further testing is required.

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan for EP241

I. Background

A. Emissions Unit

Facility:	Penford Products Co., Cedar Rapids, Iowa
Description:	Steep & Surge Tanks & Millhouse Tanks
Identification:	EU04-STEEPS&MILL

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.:	LCPH PTO 5919
Emission Limit:	VOC: 8.42 lb/hr
Monitoring Requirements:	scrubber water flow rate

C. Control Technology

Description:	Packed Bed Scrubber (CE04SR070403)

II. Monitoring Approach

A. Indicator

scrubber water flow rate

B. Indicator Range

Minimum of 270 gallons per minute during normal operation.
An excursion is defined as an hourly average (60 minute) scrubber water flow rate less than the indicator range.

C. Measurement Approach

Flow rate measurement using flow meter.

D. Performance Criteria

Data Representativeness:	The fresh water flow rate is measured in the inlet piping to the scrubber.
Verification of Operational Status:	Emission unit operation is verified at the time of measurement. Records of water flow rate readings will be maintained for five years.
QA/QC Practices and Criteria:	Flow meter will be maintained per the manufacturer's specifications.
Monitoring Frequency:	Water flow rate is measured continuously and recorded via data acquisition system. The scrubber water flow rate measurement and record will be made daily during a period when the emission unit is in operation.
Data Collection Procedures:	The scrubber water flow rate will be recorded on the air monitoring form (which may be electronic record in the future). If the DAS display (real-time) is outside the indicator range, the hourly average flow rate (sixty 1-minute readings) will be calculated and recorded.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 251

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
251	05-GLUTF&VETP	Gluten Filters & Vetter Presses	Corn By-Products	44 tph (112,000 BPD)	05SR54001	Scrubber - Alkaline

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
251	SO_2	0.08 lb/hr	LCPH ATI 6086 / PTO 5924
		500 ppmv	LCPH ATI 6086 / PTO 5924 LCO 10.12(2) 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Control Device:

A packed bed scrubber shall be installed 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 Record keeping" shall be installed, maintained and operating during the operation of the emission unit and control equipment at all times.

Authority for Requirement: LCPH ATI 6086 / PTO 5924

Operating Limits:

A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The recirculation water flow rate in the scrubber shall be no less than 135 gpm.
C. The pH in the scrubber shall be no less than 11.
D. The normal differential pressure across the scrubber shall be maintained between 0.4" – 9.0" w.c.[(1)]

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 6086 / PTO 5924

Operating Condition Monitoring and Recordkeeping:

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of 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. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall monitor and record the recirculation water flow rate in the scrubber on a weekly basis.
B. The owner or operator shall monitor and record the pH of the scrubbing liquid on a weekly basis.
C. The owner or operator shall monitor and record the differential pressure across the scrubber on a weekly basis.

D. The owner or operator shall maintain a record of all maintenance completed on the control device.
Authority for Requirement: LCPH ATI 6086 / PTO 5924

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
251	6086 / 5924	65.9	V	24	100	19981

The temperature and flow rates are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: SO_2
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 255

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
255	05BL53001	Pneumatic System – Gluten Meal Recycle	Corn Gluten Meal	4.3 tph	05BH53001	BH-FR

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
255	PM	0.01 gr/dscf; 0.05 lb/hr	LCPH ATI 5269 / PTO 5935
	PM_{10}	0.05 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
255	Opacity	20%	LCPH ATI 5269 / PTO 5935 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5269 / PTO 5935 567 IAC 23.4(7) LCO 10.9(1)"g"

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 installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 5269 / PTO 5935

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 maintained between 0.4" and 8.0" w.c. [(1)]
[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*
Authority for Requirement: LCPH ATI 5269 / PTO 5935

Operating Condition Monitoring and Record keeping:
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 the differential pressure across the control device on a weekly basis.
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 maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5269 / PTO 5935

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
255	5269 / 5935	57	V	10.5	180	690

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 260

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
260	05DR042006	Germ Rotary Tube Dryer #6	Germ	5.8 tph water removed (evaporation rate)	05CY042008	Cyclone
					05SR042007	Scrubber - Alkaline

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
260	PM/PM_{10}	1.63 lb/hr	LCPH ATI 6281 / PTO 6147
	SO_2	2.81 lb/hr	
	VOC	8.7 lb/hr	
	SHAP	9.4 tpy	
	THAP	24.4 tpy	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
260	Opacity	20%	LCPH ATI 6281 / PTO 6147 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6281 / PTO 6147 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO_2	500 ppmv	LCPH ATI 6281 / PTO 6147 LCO 10.12(2) 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Control Device:

A cyclone and venturi scrubber shall be installed to control sulfur dioxide and 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control equipment at all times.
Authority for Requirement: LCPH ATI 6281 / PTO 6147

Operating Limits:

A. The control equipment shall be maintained according to the manufacturer's specifications and good operating practices.
B. The recirculation water flow rate in CE05SR042007 shall be ≥ 105 gpm.
C. The pH of the scrubbing liquid in CE05SR042007 shall be maintained ≥ 7.
D. The normal static pressure of CE05SR042007 shall be maintained between 10" to 14" w.c.[(1)]
E. The fresh water flow rate in CE05SR042007 shall be ≥ 10 gpm on a 3-hr average.

(1) If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This operating limit does not apply during periods of startup, shutdown, or cleaning of control equipment.
Authority for Requirement: LCPH ATI 6281 / PTO 6147

Operating Condition Monitoring and Recordkeeping:
Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of 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. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall monitor and record the recirculation water flow rate in CE05SR042007 on a weekly basis.
B. The owner or operator shall monitor and record the pH of the scrubbing liquid in CE05SR042007 on a weekly basis.
C. The owner or operator shall monitor and record the static pressure of CE05SR042007 on a weekly basis.
D. The owner or operator shall monitor and record the fresh water flow rate in CE05SR042007 on a weekly basis.
E. The owner or operator shall maintain a record of all maintenance completed on the control equipment.
F. 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.

Authority for Requirement: LCPH ATI 6281 / PTO 6147

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
260	6281 / 6147	68	V	36	170	14100

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM, PM10
See Plant-Wide Monitoring Section for Agency O & M Plan.

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

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

Compliance Assurance Monitoring (CAM) Plan for EP260

I. Background

A. Emissions Unit

Facility:	Penford Products Co., Cedar Rapids, Iowa
Description:	Germ Rotary Tube Dryer #6
Identification:	EU05DR042006

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.:	LCPH PTO 6147
Emission Limit:	SO2: 2.81 lb/hr
Monitoring Requirements:	Scrubber Water pH

C. Control Technology

Description:	Scrubber (CE05SR042007)

II. Monitoring Approach

A. Indicator	pH measurement of the scrubber recirculation water.
B. Indicator Range	minimum pH of 7.0
C. Measurement Approach	pH measurement using pH meter

D. Performance Criteria

Data Representativeness:	pH measurement of the scrubber recirculation water.
Verification of Operational Status:	Emission unit operation is verified at the time of measurement. Records of pH readings will be maintained for five years.
QA/QC Practices and Criteria:	pH meter will be maintained per the manufacturer's specifications.
Monitoring Frequency:	pH is measured continuously and recorded via data acquisition. The manual pH measurement and record will be made daily during a period when the emission unit is in operation.
Data Collection Procedures:	The manual pH readings will be recorded on the air monitoring form (which may be electronic record in the future).

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 261, 262, 263, 264

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
261	05DR42004	Germ Rotary Tube Dryer #4 – Cooling	Corn Germ	8.8 tph; 103,000 BPD	05CY42004	Cyclone
262	05DR42003	Germ Rotary Tube Dryer #3	Corn Germ	8.8 tph; 103,000 BPD	05CY42003	Cyclone
263	05DR42002	Germ Rotary Tube Dryer #2	Corn Germ	8.8 tph; 103,000 BPD	05CY42002	Cyclone
264	05DR42001	Germ Rotary Tube Dryer #1	Corn Germ	8.8 tph; 103,000 BPD	05CY42001	Cyclone

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
261,262	PM/PM_{10}	2.0 lb/hr	LCPH ATI 6087 / PTO 5925 LCPH ATI 6088 / PTO 5926

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
261,262, 263,264	Opacity	20%	LCPH ATI 6087 / PTO 5925 LCPH ATI 6088 / PTO 5926 LCPH ATI 6089 / PTO 5927 LCPH ATI 6090 / PTO 5930 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6087 / PTO 5925 LCPH ATI 6088 / PTO 5926 LCPH ATI 6089 / PTO 5927 LCPH ATI 6090 / PTO 5930 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO_2	500 ppmv	LCPH ATI 6087 / PTO 5925 LCPH ATI 6088 / PTO 5926 LCPH ATI 6089 / PTO 5927 LCPH ATI 6090 / PTO 5930 LCO 10.12(2) 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Control Device:

A cyclone shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 6087 / PTO 5925; LCPH ATI 6088 / PTO 5926

LCPH ATI 6089 / PTO 5927; LCPH ATI 6090 / PTO 5930

Operating Limits:

A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.

Authority for Requirement: LCPH ATI 6087 / PTO 5925; LCPH ATI 6088 / PTO 5926
LCPH ATI 6089 / PTO 5927; LCPH ATI 6090 / PTO 5930

Operating Condition Monitoring and Record keeping:

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 daily 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. The owner or operator shall maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 6087 / PTO 5925; LCPH ATI 6088 / PTO 5926
LCPH ATI 6089 / PTO 5927; LCPH ATI 6090 / PTO 5930

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
261	6087 / 5925	68.1	V	24	100	7804
262	6088 / 5926	68.1	V	24	100	7804
263	6089 / 5927	68.1	V	24	135	7804
264	6090 / 5930	68.1	V	24	135	7804

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 265

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
265	05DR42005	Germ Predryer	Corn Germ	8.63 tph; 101,000 BPD	05CY42005 05CY42006 05CY42007	Cyclone 1 Cyclone 2 Cyclone 3
	05MS42001	Germ Predryer (Natural Gas Combustion)	Natural Gas	33.75 MMBtu/hr		

Applicable Requirements

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

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

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
265	PM[1]	0.015 gr/dscf; 2.66 lb/hr; 11.65 tpy	LCPH ATI 6091 / PTO 5929 DNR PSD #03-A-097
	PM_{10}	3.34 lb/hr	LCPH ATI 6091 / PTO 5929
	Opacity	No VE	LCPH ATI 6091 / PTO 5929 DNR PSD #03-A-097
	SO_2	8.7 lb/hr; 38.11 tpy	LCPH ATI 6091 / PTO 5929
	NO_x	100 lb/MMscf	LCPH ATI 6091 / PTO 5929 DNR PSD #03-A-097

[1] PM limit is filterable or "front-half" only as measured pursuant to 40 CFR Part 60, Appendix A, Method 5.

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
265	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"
	SO_2	500 ppmv	LCPH ATI 6091 / 5929 DNR PSD #03-A-097 LCO 10.12(2) 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Control Device:

Three (3) high efficiency cyclones shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6091 / PTO 5929

Operating Limits:

A) The maximum grind rate of the facility shall not exceed 90,000 bushels/day on a 12-month rolling average basis.

B) The following temperatures are based on compliance testing completed on November 30, 1999.

Sampling Point	Temperature	Maximum Allowable
Dryer Inlet	425 °F	575 °F
Dryer Outlet	137 °F	172 °F

Dryer inlet temperature shall not exceed 575 °F and the dryer outlet temperatures shall not exceed 172 °F during normal plant operation. This department recognizes the fact that deviations may occur, where temperatures may exceed these limits. Deviations where temperatures exceed the maximum allowable shall be for periods no longer than 15 minutes. Immediate action should be taken to bring the temperature back into compliance.

C) The Germ Fluidized Bed Predryer shall only combust natural gas.

D) The Germ Fluidized Bed Predryer shall not combust more than 251.30 MMscf of natural gas per twelve-month rolling period.

E) The Germ Fluidized Bed Predryer and associated gas heater shall not operate if visible emissions are observed from the emission point associated with this permit. If visible emissions are observed the facility shall shut down the Germ Fluidized Bed Predryer and associated gas heater and correct the problem(s) which are causing the unit to emit visible emissions. The dryer cannot be used again until the unit ceases to emit visible emissions.

Authority for Requirement: LCPH ATI 6091 / PTO 5929
DNR PSD #03-A-097 (Requirements C, D and E only)

Operating Condition Monitoring and Record keeping:

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 facility shall record monthly natural gas usage (units of scf/month) for the Germ Fluidized Bed Predryer. During the initial 12 months of operation, cumulative natural gas usage shall be determined for each month of operation. After the initial 12 months of operation, annual natural gas usage shall be determined on a 12 month rolling basis, for each month of operation.

B) The facility shall perform daily visible emissions opacity tests or Method 22 on the Germ Fluidized Bed Predryer.

C) The facility shall record the static pressure of each of the three (3) cyclones on a daily basis.

D) The facility shall monitor dryer inlet and outlet temperatures which shall be recorded manually at a minimum of once every four (4) hours*

E) The facility shall record the daily grind rate

F) The facility shall maintain records of all maintenance and repair completed on the control device.

** Continuous temperature monitoring data records may be used in lieu of manually recording the dryer inlet and outlet temperatures once every four (4) hours.*

Authority for Requirement: LCPH ATI 6091 / PTO 5929
DNR PSD #03-A-097 (Requirements A, B and C only)

Quarterly Report Requirements:

The following information shall be submitted to this department by the 30th of each month for the previous quarter (January 30, April 30, July 30 and October 30).

1. daily average grind rate for each month of the quarter
2. Monthly Natural Gas Consumption Totals based on a 12-month rolling total period

Authority for Requirement: LCPH ATI 6091 / PTO 5929

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
265	6091 / 5929	90	V	60	165	54500
	DNR PSD #03-A-097	58	V	60	147	20718 (scfm)

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan for EP265

I. Background

A. Emissions Unit
Facility: Penford Products Co., Cedar Rapids, Iowa
Description: Germ Predryer
Identification: EU05DR42005, EU05MS42001

B. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: PSD Permit 03-A-097, LCPH PTO 5929
Emission Limit: PM filterable: 2.66 lb/hr, 0.015 gr/dscf
PM10: 3.34 lb/hr
Monitoring Requirement: visible emissions

C. Control Technology
Description: Cyclones (CE05CY42005, CE05CY42006, CE05CY42007)

II. Monitoring Approach

A. Indicator
Visible emissions

B. Indicator Range
No visible emissions.

C. Measurement Approach
Visible emissions from cyclone exhaust.

D. Performance Criteria

Data Representativeness:	Visible emissions from cyclone exhaust while germ dryer is operating.
Verification of Operational Status:	Emission unit operation is verified at the time of reading. Records of visible emission readings will be maintained for five years.
QA/QC Practices and Criteria:	Observer trained to detect visible emissions.
Monitoring Frequency:	The visible emission measurements and record will be made daily during a period when the emission unit is in operation.
Data Collection Procedures:	The visible emissions readings will be recorded on the air monitoring form (which may be electronic record in the future).

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 271

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
271	05VP52701	#6 Gluten Filter Vacuum Pump	Air/Filtrate Water	0.875 tph	--	--

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.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
271	PM	0.1 gr/dscf	LCPH ATI 5073 / PTO 5936 567 IAC 23.3(2)"a"(1) LCO 10.9(1)"a"
	Opacity	20%	LCPH ATI 5073 / PTO 5936 LCO 10.7
	SO_2	500 ppmv	LCPH ATI 5073 / PTO 5936 LCO 10.12(2) 567 IAC 23.3(3)"e"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
271	5073 / 5936	52	V	5.25	118	1000

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 275

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
275	70DR54001	Gluten Meal Dryer	Corn Gluten Meal	6.1 tph; 101,000 BPD	70SR54001	Scrubber
	70MS54001	Gluten Meal Dryer (Natural Gas Combustion)	Natural Gas	21.5 MMBtu/hr		

Applicable Requirements

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

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

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
275	PM	0.03 gr/dscf; 14.51 lb/hr	LCPH ATI 6092 / PTO 5930 DNR PSD #03-A-098
	PM	0.03 gr/dscf; 14.51 lb/hr; 2.7 lb/hr	LCPH ATI 6092 / PTO 5930
	PM_{10}	0.03 gr/dscf; 14.51 lb/hr	DNR PSD #03-A-098
	PM_{10}	0.03 gr/dscf; 14.51 lb/hr; 2.7 lb/hr	LCPH ATI 6092 / PTO 5930
	Opacity	No VE	LCPH ATI 6092 / PTO 5930 DNR PSD #03-A-098
	SO_2	6.5 lb/hr; 28.47 tpy	LCPH ATI 6092 / PTO 5930
	NO_x	100 lb/MMscf	LCPH ATI 6092 / PTO 5930 DNR PSD #03-A-098

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
275	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"
	SO_2	500 ppmv	LCPH ATI 6092 / 5930 DNR PSD #03-A-098 LCO 10.12(2) 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Control Device:

A wet scrubber shall be installed to control particulate matter and 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6092 / PTO 5930

Operating Limits:

A. The maximum grind rate of the facility shall not exceed 90,000 bushels/day on a 12-month rolling average basis.
B. The addition of no less than 2 gpm of steepwater shall be added at all times the dryer is operating.
C. This Gluten Meal Dryer shall only combust natural gas.
D. This Gluten Meal Dryer shall not combust more than 160.09 MMscf of natural gas per 12-month rolling period.
E. This Gluten Meal Dryer shall not operate if visible emissions are observed from the emission point associated with this permit. If visible emissions are observed the facility shall shut down the gluten meal dryer and correct the problem(s) which are causing the visible emissions. The dryer cannot be used again until the unit ceases to emit visible emissions.
F. A spin sample shall be taken from the scrubber recycle water once every eight (8) hours. Solids in the scrubber recycle water after centrifuging shall not exceed 1.2 mL per 15 mL sample or eight percent (8%) solids. Appropriate documentation shall be entered in the logbook following the exceedance showing the corrective actions taken.
G. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
H. The recirculation water flow rate in the scrubber shall be no less than 270 gpm.
I. The normal differential pressure across the scrubber shall be maintained between 6.0" – 18" w.c. [(1)]
J. The pH of the scrubbing liquid shall be maintained at a minimum of 5.6. [(1)]

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 6092 / PTO 5930
DNR PSD #03-A-098 (Requirements C, D and E only)

Operating Condition Monitoring and Record keeping:

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 record monthly natural gas usage (units of scf/month) for the gluten meal dryer. During the initial 12 months of operation, cumulative natural gas usage shall be determined for each month of operation. After the initial 12 months of operation, annual natural gas usage shall be determined on a 12 month rolling basis, for each month of operation.
B. The owner or operator shall perform daily visible emissions opacity tests per Method 22 on the Gluten Meal Dryer.
C. The owner or operator shall record the daily grind rate and calculate a 12-month rolling average grind rate.
D. The owner or operator shall monitor and record the scrubber water solids content on a daily basis.
E. The owner or operator shall monitor and record the recirculation water flow rate in the scrubber on a daily basis.
F. The owner or operator shall monitor and record the differential pressure across the scrubber on a daily basis.
G. The owner or operator shall monitor and record the amount of steepwater added on a daily basis.
H. The owner or operator shall monitor and record the pH of the scrubbing liquid on a daily basis.
I. The owner or operator shall maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 6092 / PTO 5930
DNR PSD #03-A-098 (Requirements A, B, E and F only)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
275	6092 / 5930	117	V	57	120	49249
	DNR PSD #03-A-098	117	V	57	123	56411 (scfm)

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Stack Testing:
Pollutant – Sulfur Dioxide
1st Stack Test to be Completed by – June 21, 2015
Test Method –40 CFR 60, Appendix A, Method 6C
Authority for Requirement – 567 IAC 22.108(3)

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan for EP275

I. Background

A. Emissions Unit
Facility: Penford Products Co., Cedar Rapids, Iowa
Description: Gluten Meal Dryer
Identification: EU70DR54001, EU70MS54001

B. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: LCPH PTO 5930
Emission Limit: PM/PM10: 2.7 lb/hr, 0.03 gr/dscf; SO2: 6.5 lb/hr
Monitoring Requirements: scrubber water flow rate

C. Control Technology
Description: Scrubber (CE70SR54001)

II. Monitoring Approach

	Indicator 1	Indicator 2
A. Indicator	Specific gravity measurement of the scrubber recirculation water.	pH measurement of the scrubber recirculation water.
B. Indicator Range	Maximum of 1.2 mL per 15 mL sample.	Minimum pH of 5.6.
C. Measurement Approach	Specific gravity measurement using densitometer.	pH measurement using pH meter

D. Performance Criteria

	Indicator 1	Indicator 2
Data Representativeness:	Specific gravity measurement of the scrubber recirculation water.	pH measurement of the scrubber recirculation water.
Verification of Operational Status:	Emission unit operation is verified at the time of measurement. Records of specific gravity readings will be maintained for five years.	Emission unit operation is verified at the time of measurement. Records of pH readings will be maintained for five years.
QA/QC Practices and Criteria:	Densitometer will be maintained per the manufacturer's specifications.	pH meter will be maintained per the manufacturer's specifications.
Monitoring Frequency:	The specific gravity measurement and record will be made daily during a period when the emission unit is in operation.	pH is measured continuously and recorded via data acquisition. The manual pH measurement and record will be made daily during a period when the emission unit is in operation.
Data Collection Procedures:	The specific gravity readings will be recorded on the air monitoring form (which may be electronic record in the future).	The pH readings will be recorded on the air monitoring form (which may be electronic record in the future).

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 279

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
279	05-PROCESS-TKS	Bldg 05 Process Tanks	Corn Wet Milled Products	135 tph; 112,000 BPD	05SR70402	Scrubber - Alkaline

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
279	SO_2	0.4 lb/hr	LCPH ATI 6601 / PTO 6439
		500 ppmv	LCPH ATI 6601 / PTO 6439 LCO 10.12(2) 567 IAC 23.3(3)"e"

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

Control Device:
A packed bed scrubber shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control equipment at all times.
Authority for Requirement: LCPH ATI 6601 / PTO 6439

Operating Limits:
A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The recirculation water flow rate in the scrubber shall be no less than 125 gpm.
C. The pH of the scrubbing liquid shall be no less than 9.0.
D. The normal differential pressure across the scrubber shall be maintained between 0.1" – 7.0" w.c.[(1)]

[(1)] If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.
Authority for Requirement: LCPH ATI 6601 / PTO 6439

Operating Condition Monitoring and Record keeping:
Unless specified by a federal regulation, 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. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall monitor and record the recirculation water flow rate in the scrubber on a weekly basis.
B. The owner or operator shall monitor and record the pH of the scrubbing liquid on a weekly basis.

C. The owner or operator shall monitor and record the differential pressure across the scrubber on a weekly basis.
D. The owner or operator shall maintain a record of all maintenance completed on the control device.
Authority for Requirement: LCPH ATI 6601 / PTO 6439

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
279	6601 / 6439	61.5	V	28	117	6500

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: SO_2
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 285

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
285	58-CORNCONVEY	Corn Unload & Handling	Corn Cleanings	135 tph; 112,000 BPD	58BH003210	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
285	PM/PM_{10}	4.0 lb/hr	LCPH ATI 6094 / PTO 5932

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
285	Opacity	20%	LCPH ATI 6094 / PTO 5932 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6094 / PTO 5932 567 IAC 23.4(7) LCO 10.9(1)"g"

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 installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6094 / PTO 5932

Operating Limits:

A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The normal differential pressure across the baghouse shall be maintained between 0.4" to 9.0" w.c.[(1)]

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This operating limit does not apply during periods of startup, shutdown, or cleaning of control equipment.*
Authority for Requirement: LCPH ATI 6094 / PTO 5932

Operating Condition Monitoring and Record keeping:

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 the differential pressure across the control device on a weekly basis.

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 maintain a record of all maintenance completed on the control device.
Authority for Requirement: LCPH ATI 6094 / PTO 5932

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
285	6094 / 5932	106.5	V	60	70	49385

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

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

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

Compliance Assurance Monitoring (CAM) Plan for EP285

I. Background

A. Emissions Unit
Facility: Penford Products Co., Cedar Rapids, Iowa
Description: Corn Unload and Handling
Identification: EU58BH003210

B. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: LCPH PTO 5932
Emission Limit: PM: 4.0 lb/hr, 0.1 gr/dscf
PM10: 4.0 lb/hr
Opacity emission limit: 20%
Monitoring Requirement: differential pressure readings

C. Control Technology
Description: Baghouse (CE58BH003210)

II. Monitoring Approach

A. Indicator
Differential pressure across the baghouse.

B. Indicator Range

Minimum of 0.4 in w.c., except during startup, shutdown, cleaning of control equipment, or immediately after new bags are installed.
An excursion is defined as an hourly average (60 minute) differential pressure reading that is less than the indicator range.

C. Measurement Approach

Differential pressure measurement using pressure gauge.

D. Performance Criteria

Data Representativeness:	Differential pressure is measured across the baghouse.
Verification of Operational Status:	Emission unit operation is verified at the time of measurement. Records of differential pressure readings will be maintained for five years.
QA/QC Practices and Criteria:	Pressure gauge will be maintained per the manufacturer's specifications.
Monitoring Frequency:	Differential pressure is measured continuously and recorded via data acquisition system. The differential pressure measurement and record will be made daily during a period when the emission unit is in operation.
Data Collection Procedures:	The differential pressure will be recorded on the air monitoring form (which may be electronic record in the future). If the DAS display (real-time) is outside the indicator range, the hourly average flow rate (sixty 1-minute readings) will be calculated and recorded.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 290

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
290	08TANKS	Starch Slurry Tanks – Bldg 8	Starch Slurry	600 gpm starch slurry/hr	08Q01	Scrubber

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
290	SO_2	1.0 lb/hr	LCPH ATI 6442 / PTO 6214
		500 ppmv	LCPH ATI 6442 / PTO 6214 LCO 10.12(2) 567 IAC 23.3(3)"e"

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

Control Device:
A packed bed scrubber shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6442 / PTO 6214

Operating Limits:
A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The fresh water flow in the scrubber shall be maintained at a rate ≥ 1.0 liter/minute.[(1)]
[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*
Authority for Requirement: LCPH ATI 6442 / PTO 6214

Operating Condition Monitoring and Record keeping:
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 the fresh water flow rate in the scrubber on a weekly basis.
B. The owner or operator shall maintain a record of all maintenance completed on the control device.
C. 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.
Authority for Requirement: LCPH ATI 6442 / PTO 6214

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
290	6442 / 6214	37	H	18	100	997

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: SO_2

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 294

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
294	58W22	Vacuum System – Bldg 58/59	Corn By-Products	135 tph; 112,000 BPD	58BH003201	BH-FR

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
294	PM	0.01 gr/dscf; 0.04 lb/hr	LCPH ATI 6096 / PTO 5934
	PM_{10}	0.04 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
294	Opacity	20%	LCPH ATI 6096 / PTO 5934 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6096 / PTO 5934 567 IAC 23.4(7) LCO 10.9(1)"g"

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 installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6096 / PTO 5934

Operating Limits:
A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The normal differential pressure across the baghouse shall be maintained between 0.4" – 8.0" w.c.[(1)]
[(1)] If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.
Authority for Requirement: LCPH ATI 6096 / PTO 5934

Operating Condition Monitoring and Record keeping:
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 the differential pressure across the control device on a weekly basis.

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 maintain a record of all maintenance completed on the control device.
Authority for Requirement: LCPH ATI 6096 / PTO 5934

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
294	6096 / 5934	25	H	6	180	601

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 299

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
299	95W01	Hexane Vapor Extraction	Hexane	0 tph	--	--

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.

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
299	VOC	1.45 lb/hr	LCPH ATI 2959 / PTO 2861

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

Reporting:
This source shall submit quarterly reports to the Air Pollution Control Division that document the VOC emissions from this source. After a period of time, in which the quarterly reports have documented a low, stable level of VOC emissions, this source may petition the Division to cease the submission of quarterly reports.
Authority for Requirement: LCPH ATI 2959 / PTO 2861

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 325

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
325	25BD171601 25TK171601	Starch Reslurry – Bldg 25	Starch Slurry	20 tph	25BH171901	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
325	PM/PM_{10}	0.26 lb/hr	LCPH ATI 6312 / PTO 6101

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
325	Opacity	20%	LCPH ATI 6312 / PTO 6101 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6312 / PTO 6101 567 IAC 23.4(7) LCO 10.9(1)"g"

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 installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6312 / PTO 6101

Operating Limits:

A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The normal differential pressure across the baghouse shall be maintained between 0.1" – 8.0" w.c.[(1)]

[(1)] If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.

Authority for Requirement: LCPH ATI 6312 / PTO 6101

Operating Condition Monitoring and Record keeping:

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 the differential pressure across the control device on a weekly basis.
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 maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 6312 / PTO 6101

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
325	6312 / 6101	29.5	V	14	110	1500

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 403

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
403	69Z02	Blender #2	Starch	25 tph	69Y02B	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
403	PM	0.01 gr/dscf; 0.212 lb/hr	LCPH ATI 5305 / PTO 5281
	PM_{10}	0.212 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
403	Opacity	20%	LCPH ATI 5305 / PTO 5281 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5305 / PTO 5281 567 IAC 23.4(7) LCO 10.9(1)"g"

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 installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 5305 / PTO 5281

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 maintained between 0.4" and 8.0" w.c. (1)
(1) *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*
Authority for Requirement: LCPH ATI 5305 / PTO 5281

Operating Condition Monitoring and Record keeping:
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 the differential pressure across the control device on a weekly basis.

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 maintain a record of all maintenance completed on the control device.
Authority for Requirement: LCPH ATI 5305 / PTO 5281

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
403	5305 / 5281	80.4	V	8.5	90	2648

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 404

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
404	69Z482501	Blender #1	Starch	25 tph	69BH482501	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
404	PM/PM_{10}	0.01 gr/dscf; 0.12 lb/hr; 0.53 tpy	LCPH ATI 4356 / PTO 4451

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
404	Opacity	20%	LCPH ATI 4356 / PTO 4451 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4356/ PTO 4451 567 IAC 23.4(7) LCO 10.9(1)"g"

Operational Limits & Requirements

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

Control Device:

A baghouse dust collector 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4356 / PTO 4451

Operating Limits:

A. The maximum operating capacity of this device is:
Blender #1: 25 tph
Authority for Requirement: LCPH ATI 4356 / PTO 4451

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. Weekly pressure drop across the fabric filter dust collector
B. Weekly opacity observations when in use (non CFR reference Method 9)*
C. All maintenance completed on the control device
All monitors shall be easily accessible to air pollution personnel.

*If visible emissions are observed corrective actions shall take place within 8 hours of the observation or by the start of the next working day.
Authority for Requirement: LCPH ATI 4356 / PTO 4451

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
404	4356 / 4451	62.6	V	7	100	1377 ± 10% (dscfm)

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 407, 409, 413, 414

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
407	69-LOADOUTMID	Bulk Loadout – Middle	Starch	25 tph	69Y03	BH-DC
409	69W11	Pneumatic System – Dryer #11	Starch	21.5 tph	69Y11A	BH-FR
413	69W02	Pneumatic System – Blender #2 & Finish Bins	Starch	25 tph	69Y02A	BH-FR
414	69Z11	Scalping Reel – Dryer 11	Starch	6 tph	69Y11B	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
407	PM	0.01 gr/dscf; 0.096 lb/hr	LCPH ATI 5307 / PTO 5283
	PM_{10}	0.096 lb/hr	
409	PM	0.01 gr/dscf; 0.078 lb/hr	LCPH ATI 5308 / PTO 5284
	PM_{10}	0.078 lb/hr	
413	PM	0.01 gr/dscf; 0.136 lb/hr	LCPH ATI 5309 / PTO 5285
	PM_{10}	0.136 lb/hr	
414	PM	0.01 gr/dscf; 0.090 lb/hr	LCPH ATI 5310 / PTO 5286
	PM_{10}	0.090 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
407,409, 413,414	Opacity	20%	LCPH ATI 5307 / PTO 5283 LCPH ATI 5308 / PTO 5284 LCPH ATI 5309 / PTO 5285 LCPH ATI 5310 / PTO 5286 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5307 / PTO 5283 LCPH ATI 5308 / PTO 5284 LCPH ATI 5309 / PTO 5285 LCPH ATI 5310 / PTO 5286 567 IAC 23.4(7) LCO 10.9(1)"g"

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

Authority for Requirement: LCPH ATI 5307 / PTO 5283; LCPH ATI 5308 / PTO 5284
LCPH ATI 5309 / PTO 5285; LCPH ATI 5310 / PTO 5286

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 maintained between 0.4" and 8.0" w.c. [(1)]

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 5307 / PTO 5283; LCPH ATI 5308 / PTO 5284
LCPH ATI 5309 / PTO 5285; LCPH ATI 5310 / PTO 5286

Operating Condition Monitoring and Record keeping:

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 the differential pressure across the control device on a weekly basis.
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 maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5307 / PTO 5283; LCPH ATI 5308 / PTO 5284
LCPH ATI 5309 / PTO 5285; LCPH ATI 5310 / PTO 5286

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
407	5307 / 5283	76.2	V	6	90	1194
409	5308 / 5284	67	Horizontal	6	180	1126
413	5309 / 5285	69.1	Horizontal	8	180	2011
414	5310 / 5286	82	Horizontal	5	90	1129

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 421, 423, 425, 427, 429, 430, 431

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
421	69BN490101	Storage Bin #1	Starch	25 tph	69BH490101	BH-BV
423	69BN490301	Storage Bin #3	Starch	25 tph	69BH490301	BH-BV
425	69BN490501	Storage Bin #5	Starch	25 tph	69BH490501	BH-BV
427	69BN490701	Storage Bin #7	Starch	25 tph	69BH490701	BH-BV
429	69BN490901	Storage Bin #9	Starch	25 tph	69BH490901	BH-BV
430	69BN491001	Storage Bin #10	Starch	25 tph	69BH491001	BH-BV
431	69BN491101	Storage Bin #11	Starch	25 tph	69BH491101	BH-BV

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
421	PM/PM_{10}	0.01 gr/dscf; 0.042 lb/hr; 0.184 tpy	LCPH ATI 3995 / PTO 3995
423	PM/PM_{10}	0.01 gr/dscf; 0.042 lb/hr; 0.184 tpy	LCPH ATI 3996 / PTO 3996
425	PM/PM_{10}	0.01 gr/dscf; 0.042 lb/hr; 0.184 tpy	LCPH ATI 3997 / PTO 3997
427	PM/PM_{10}	0.01 gr/dscf; 0.042 lb/hr; 0.184 tpy	LCPH ATI 3998 / PTO 3998
429	PM/PM_{10}	0.01 gr/dscf; 0.042 lb/hr; 0.184 tpy	LCPH ATI 3999 / PTO 3999
430	PM/PM_{10}	0.01 gr/dscf; 0.042 lb/hr; 0.184 tpy	LCPH ATI 4000 / PTO 4000
431	PM/PM_{10}	0.01 gr/dscf; 0.042 lb/hr; 0.184 tpy	LCPH ATI 4001 / PTO 4001

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
421,423, 425,427, 429,430, 431	Opacity	20%	LCPH ATI 3995 / PTO 3995 LCPH ATI 3996 / PTO 3996 LCPH ATI 3997 / PTO 3997 LCPH ATI 3998 / PTO 3998 LCPH ATI 3999 / PTO 3999 LCPH ATI 4000 / PTO 4000 LCPH ATI 4001 / PTO 4001 LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

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

Authority for Requirement: LCPH ATI 3995 / PTO 3995; LCPH ATI 3996 / PTO 3996
LCPH ATI 3997 / PTO 3997; LCPH ATI 3998 / PTO 3998
LCPH ATI 3999 / PTO 3999; LCPH ATI 4000 / PTO 4000
LCPH ATI 4001 / PTO 4001

Operating Limits:
A. The maximum operating capacity of this source is 25 ton/hour
Authority for Requirement: LCPH ATI 3995 / PTO 3995; LCPH ATI 3996 / PTO 3996
LCPH ATI 3997 / PTO 3997; LCPH ATI 3998 / PTO 3998
LCPH ATI 3999 / PTO 3999; LCPH ATI 4000 / PTO 4000
LCPH ATI 4001 / PTO 4001

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. Weekly pressure differential across the dust collector
B. Record all maintenance and repair completed on the control device.
Authority for Requirement: LCPH ATI 3995 / PTO 3995; LCPH ATI 3996 / PTO 3996
LCPH ATI 3997 / PTO 3997; LCPH ATI 3998 / PTO 3998
LCPH ATI 3999 / PTO 3999; LCPH ATI 4000 / PTO 4000
LCPH ATI 4001 / PTO 4001

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
421	3995 / 3995	69.2	V	6	90	500
423	3996 / 3996	69.2	V	6	90	500
425	3997 / 3997	69.2	V	6	90	500
427	3998 / 3998	69.2	V	6	90	500
429	3999 /3999	69.2	V	6	90	500
430	4000 / 4000	73.7	V	6	90	500
431	4001 / 4001	77.5	V	6	90	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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 446

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
446	69D11	Dryer #11	Starch	6 tph	69HRU	Heat Reclaim Unit

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.

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
446	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 457

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
457	69D12	Dryer #12	Starch	16,000 lbs/hr (commercial basis)	69Q12	Scrubber

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
457	PM/PM_{10}	2.07 lb/hr	LCPH ATI 3285 / PTO 3989

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
457	Opacity	20%	LCPH ATI 3285 / PTO 3989 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 3285 / PTO 3989 567 IAC 23.4(7) LCO 10.9(1)"g"

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

Control Device:
A wet scrubber shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 3285 / PTO 3989

Operating Limits:
A. A densitometer shall be installed to monitor the density (g/cc) of the scrubber recycle water. The densitometer readings shall not exceed 1.030 g/cc.
B. The scrubber water recycle rate must be maintained ≥ 248 gpm.
C. The differential pressure shall be maintained between 7.0 – 14.0 in. w.c.[(1)]
D. The scrubber shall be maintained according to manufacturer specifications and good operating practices.

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*
Authority for Requirement: LCPH ATI 3285 / PTO 3989

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 the differential pressure across the scrubber on a weekly basis.
B. The owner or operator shall monitor and record the scrubber water recirculation rate on a weekly basis.
C. The owner or operator shall monitor and record the densitometer readings (g/cc) on a weekly basis.
D. The owner or operator shall maintain records of all maintenance and repair completed on the control device.
E. 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.

Authority for Requirement: LCPH ATI 3285 / PTO 3989

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
457	3285 / 3989	128.6	V	72	108	53269

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – June 21, 2015
Test Method – 40 CFR 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202
Authority for Requirement – 567 IAC 22.108(3)

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 460

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
460	69W22	Vacuum System – Bldg 69	Starch	1 tph	69Y22S	BH-FR

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
460	PM/PM_{10}	0.01 gr/dscf; 0.09 lb/hr; 0.39 tpy	LCPH ATI 3286 / PTO 3990
	Opacity	10%	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
460	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

Operational Limits & Requirements

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

Control Device:

A baghouse dust collector 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 3286 / PTO 3990

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. Weekly pressure differential across the baghouse dust collector when in operation
B. All maintenance completed on the control device

Authority for Requirement: LCPH ATI 3286 / PTO 3990

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
460	3286 / 3990	64.1	VR	6	180	1044

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 461, 463, 464, 465, 466, 467, 468, 469

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
461	69Z12	Scalping Reel – Dryer #12	Starch	17.5 tph	69Y12B	BH-DC
463	69W12	Pneumatic System – Dryer #12 to Scalping Reel	Starch	17.5 tph	69Y12A	BH-FR
464	69W05	Pneumatic System – ABC Bins to Bldg 69	Starch	25 tph	69Y05	BH-FR
465	69W16	Pneumatic System – ABC Bins to Bulk Loadout	Starch	25 tph	6916	BH-FR
466	69W12A	Pneumatic System – Dryer #12 SR to Bins/Loadout	Starch	17.5 tph	69Y12C	BH-FR
467	69-LOADOUT EAST	Bulk Loadout – East	Starch	25 tph	69Y19	BH-DC
468	69-LOADOUT WEST	Bulk Loadout – West	Starch	25 tph	69Y20	BH-DC
469	69W01	Pneumatic System – Blender #1 & Finish Bins	Starch	25 tph	69Y01A	BH-FR

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
461	PM	0.01 gr/dscf; 0.063 lb/hr	LCPH ATI 5311 / PTO 5287
	PM_{10}	0.063 lb/hr	
463	PM	0.01 gr/dscf; 0.147 lb/hr	LCPH ATI 5312 / PTO 5288
	PM_{10}	0.147 lb/hr	
464	PM	0.01 gr/dscf; 0.153 lb/hr	LCPH ATI 5313 / PTO 5289
	PM_{10}	0.153 lb/hr	
465	PM	0.01 gr/dscf; 0.145 lb/hr	LCPH ATI 5314 / PTO 5290
	PM_{10}	0.145 lb/hr	
466	PM	0.01 gr/dscf; 0.087 lb/hr	LCPH ATI 5315 / PTO 5291
	PM_{10}	0.087 lb/hr	
467	PM	0.01 gr/dscf; 0.115 lb/hr	LCPH ATI 5316 / PTO 5292
	PM_{10}	0.115 lb/hr	
468	PM	0.01 gr/dscf; 0.115 lb/hr	LCPH ATI 5317 / PTO 5293
	PM_{10}	0.115 lb/hr	
469	PM	0.01 gr/dscf; 0.159 lb/hr	LCPH ATI 5318 / PTO 5294
	PM_{10}	0.159 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
461, 463,464, 465,466, 467,468, 469	Opacity	20%	LCPH ATI 5311 / PTO 5287 LCPH ATI 5312 / PTO 5288 LCPH ATI 5313 / PTO 5289 LCPH ATI 5314 / PTO 5290 LCPH ATI 5315 / PTO 5291 LCPH ATI 5316 / PTO 5292 LCPH ATI 5317 / PTO 5293 LCPH ATI 5318 / PTO 5294 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5311 / PTO 5287 LCPH ATI 5312 / PTO 5288 LCPH ATI 5313 / PTO 5289 LCPH ATI 5314 / PTO 5290 LCPH ATI 5315 / PTO 5291 LCPH ATI 5316 / PTO 5292 LCPH ATI 5317 / PTO 5293 LCPH ATI 5318 / PTO 5294 567 IAC 23.4(7) LCO 10.9(1)"g"

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

Authority for Requirement: LCPH ATI 5311 / PTO 5287; LCPH ATI 5312 / PTO 5288
LCPH ATI 5313 / PTO 5289; LCPH ATI 5314 / PTO 5290
LCPH ATI 5315 / PTO 5291; LCPH ATI 5316 / PTO 5292
LCPH ATI 5317 / PTO 5293; LCPH ATI 5318 / PTO 5294

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 maintained between 0.4" and 8.0" w.c. (1)
C. The differential pressure across the baghouse shall be maintained between 0.1" and 7.0" w.c. **(EP 467 and EP 468)** (1)

(1) *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*

Authority for Requirement: LCPH ATI 5311 / PTO 5287; LCPH ATI 5312 / PTO 5288
LCPH ATI 5313 / PTO 5289; LCPH ATI 5314 / PTO 5290
LCPH ATI 5315 / PTO 5291; LCPH ATI 5316 / PTO 5292
LCPH ATI 5317 / PTO 5293; LCPH ATI 5318 / PTO 5294

Operating Condition Monitoring and Record keeping:

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 the differential pressure across the control device on a weekly basis.
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 maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5311 / PTO 5287; LCPH ATI 5312 / PTO 5288
LCPH ATI 5313 / PTO 5289; LCPH ATI 5314 / PTO 5290
LCPH ATI 5315 / PTO 5291; LCPH ATI 5316 / PTO 5292
LCPH ATI 5317 / PTO 5293; LCPH ATI 5318 / PTO 5294

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
461	5311 / 5287	89	H	6	90	786
463	5312 / 5288	43.5	V	9	180	2134
464	5313 / 5289	43.5	V	9	180	2219
465	5314 / 5290	43.5	V	9	180	2107
466	5315 / 5291	43.5	V	9	180	1270
467	5316 / 5292	52.5	H	8	90	1434
468	5317 / 5293	49.5	H	8	90	1434
469	5318 / 5294	94	V	9	180	2309

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 472, 473, 477

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
472	69K17A-B	Bulk Loadout Conveyor – North	Starch	25 tph	69Y17	BH-DC
473	69K18A-B	Bulk Loadout Conveyor – South	Starch	25 tph	69Y18	BH-DC
477	69T19-39	Treating Tanks – Bldg 69	Starch Slurry	0 tph	69Q01	Scrubber - Alkaline

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.

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
472, 473	Opacity	20%	LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"
477	SO_2	500 ppmv	LCO 10.12(2) 567 IAC 23.3(3)"e"

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM EP 472, EP473
SO_2 EP 477

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 478

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
478	77TANKS	Tanks – Bldg 77 & 96	Starch Slurry	20 tph	77Q10	Scrubber - Alkaline

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
478	SO_2	0.02 lb/hr	LCPH ATI 6169 / PTO 6146
		500 ppmv	LCPH ATI 6169 / PTO 6146 LCO 10.12(2) 567 IAC 23.3(3)"e"

Alternative Operating Scenario Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
478	PM	0.1 gr/dscf[1]	LCPH ATI 6169 / PTO 6146 567 IAC 23.3(2)"a"(1) LCO 10.9(1)"a"
	Opacity	20%[2]	LCPH ATI 6169 / PTO 6146 LCO 10.7

[1] This limit applies to EU77T01 (Treating Tank 1) during the starch batch re-slurry process. This is an internally-vented process.

[2] The opacity standard applies to all functional openings to Building 77 during the starch batch re-slurry process.

Operational Limits & Requirements

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

Control Device:

A packed bed scrubber shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times. Treating Tank 1 exhaust duct may be closed off during dry starch addition to prevent fouling of the scrubber.

Authority for Requirement: LCPH ATI 6169 / PTO 6146

Operating Limits:

A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The recirculation water flow rate in the scrubber shall be no less than 50 gpm.
C. The pH of the scrubbing liquid shall be no less than 8.5.
D. The differential pressure across the scrubber shall be maintained between 0.2" to 6.0" w.c.[(1)]

[(1)] If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This operating limit does not apply during periods of startup, shutdown, or cleaning of the control equipment.

Authority for Requirement: LCPH ATI 6169 / PTO 6146

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 the recirculation water flow rate in the scrubber on a weekly basis.
B. The owner or operator shall monitor and record the pH of the scrubbing liquid on a weekly basis.
C. The owner or operator shall monitor and record the differential pressure across the scrubber on a weekly basis.
D. The owner or operator shall maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 6169 / PTO 6146

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
478	6169 / 6146	39	V	16	100	1994

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: SO_2
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 480

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
480	97-REACTORS-EO	EO Reactors	Starch Slurry	1 batch/hr per reactor	96Q01	Scrubber – Acid
	97-REACTORS-PO	PO Reactors				

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
480	VOC	1 lb EO/batch; 2.1 lb PO/batch	LCPH ATI 6170 / PTO 5949
	SHAP	1 lb EO/batch; 2.1 lb PO/batch; 9.4 tpy (1)	
	THAP	24.4 tpy (1)	

(1) Plant-wide limit to remain minor for 112(g)

Operational Limits & Requirements

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

Control Device:

A packed bed scrubber shall be installed to control VOC and VHAP 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6170 / PTO 5949

Operating Limits:

A. The scrubber on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The recirculation water flow rate in the scrubber shall be maintained at a minimum of 70 gpm.
C. The differential pressure across the fan shall be maintained between 3"-6" w.c.[1]
D. The acid content of the scrubber must be maintained at greater than or equal to 10% sulfuric acid any time that the batch tanks are vented.
E. This source shall be limited to a total of 7,300 starch batches calculated on a 12-month rolling total with no more than 1,000 being PO starch batches.

[1]*It is noted that the fan differential pressure will behave inversely with the scrubber differential pressure. Under certain conditions, the scrubber differential pressure will be high enough that the fan will drop below 3" w.c.*
Authority for Requirement: LCPH ATI 6170 / PTO 5949

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 maintain a record of all maintenance completed on the control device.
B. The owner or operator shall monitor and record the recirculation water flow rate in the scrubber on a daily basis.

C. The owner or operator shall monitor and record the differential pressure across the fan on a daily basis.
D. The owner or operator shall monitor and record the scrubber water acid content on a daily basis.
Authority for Requirement: LCPH ATI 6170 / PTO 5949

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
480	6170 / 5949	49	V	5.9	90	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 any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: Ethylene Oxide
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 481

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
481	68T51-52	Treating Tanks – Bldg 68	Starch Slurry	70,000 gallon each (2 tanks)	68Q20	Scrubber – Alkaline
	68T25	SBS Tank	SBS	8,200 gallon		

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
481	SO_2	0.20 lb/hr; 10 ppmv	LCPH ATI 6162 / PTO 5950
	SHAP	9.4 tpy [(1)]	
	THAP	24.4 tpy [(1)]	

[(1)] Plant-wide limit to remain minor for 112(g)

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
481	PM	0.1 gr/dscf	LCPH ATI 6162 / PTO 5950 567 IAC 23.3(2)"a"(1) LCO 10.9(1)"a"
	Opacity	20%	LCPH ATI 6162 / PTO 5950 LCO 10.7
	SO_2	500 ppmv	LCO 10.12(2) 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

Control Device:

A packed bed scrubber shall be installed to control SO_2, VOC and HAP 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6162 / PTO 5950

Operating Limits:

A. The scrubber on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The recirculation water flow rate in the scrubber shall be maintained at a minimum of 60 gpm.
C. The differential pressure across the scrubber shall be maintained between 0.1"-8.0" w.c.[1].
D. The pH of the scrubbing liquid shall be ≥ 10.

[1] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This operating limit does not apply during periods of*

startup, shutdown, or cleaning of control equipment. It is also noted that after initial venting, pressure drop will still approach zero due to long pipe run and very low pressure.
Authority for Requirement: LCPH ATI 6162 / PTO 5950

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 maintain a record of all maintenance completed on the control device.
B. The owner or operator shall monitor and record the recirculation water flow rate in the scrubber on a weekly basis.
C. The owner or operator shall monitor and record the differential pressure across the scrubber on a weekly basis.
D. The owner or operator shall monitor and record the pH of the scrubbing liquid on a weekly basis.

Authority for Requirement: LCPH ATI 6162 / PTO 5950

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
481	6162 / 5950	71	V	20	100	2000

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: SO_2
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 521, 522, 524A

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
521	65BO201001	Boiler #1	Natural Gas	185 MMBtu/hr	65BR201001	LoNOx Burners/FGR
522	65BO202001	Boiler #2	Natural Gas	185 MMBtu/hr	65BR202001	LoNOx Burners/FGR
524A	65BO203002	Boiler #3	Natural Gas	99 MMBtu/hr	--	LoNOx Burners/FGR

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
521,522	PM/PM_{10}	1.48 lb/hr	LCPH ATI 5547 / PTO 5399 LCPH ATI 5548 / PTO 5400
	SO_2	2.04 lb/hr	
521,522, 524A	PM_{10}	14.4 tpy [(2)]	LCPH ATI 5547 / PTO 5399 LCPH ATI 5548 / PTO 5400 LCPH ATI 6180 / PTO 5957
	SO_2	17.8 tpy [(2)]	
	NO_x	39.4 tpy [(2)]	
	CO	90 tpy [(2)]	
	SHAP	9.4 tpy [(1)]	
	THAP	24.4 tpy [(1)]	
524A	PM/PM_{10}	1.50 lb/hr	LCPH ATI 6180 / PTO 5957
	NO_x	6.1 lb/hr	
	CO	16.5 lb/hr	

[(1)] Plant-wide limit to remain minor for 112(g)
[(2)] Combined emission limit (EP 521, EP 522, and EP 524A).

NSPS Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
521,522	SO_2	0.32 lb/MMbtu	LCPH ATI 5547 / PTO 5399 LCPH ATI 5548 / PTO 5400 NSPS Subpart Db
	NO_x	0.10 lb/MMbtu	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
521,522, 524A	Opacity	20%	LCPH ATI 5547 / PTO 5399 LCPH ATI 5548 / PTO 5400 LCPH ATI 6180 / PTO 5957 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5547 / PTO 5399 LCPH ATI 5548 / PTO 5400 LCPH ATI 6180 / PTO 5957 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO_2	500 ppmv	LCPH ATI 5547 / PTO 5399 LCPH ATI 5548 / PTO 5400 LCPH ATI 6180 / PTO 5957 LCO 10.12(2) 567 IAC 23.3(3)"e"

EP	Pollutant	Emission Limit(s)	Authority for Requirement
521,522	PM	0.2 lb/MMbtu	LCPH ATI 5547 / PTO 5399 LCPH ATI 5548 / PTO 5400 LCO 10.8(2)"c"
524A	PM	0.246 lb/MMbtu	LCPH ATI 6180 / PTO 5957 LCO 10.8(2)"b"

Operational Limits & Requirements

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

Control Device:

Low Nox burners and flue gas recirculation shall be used (utilized) to control NO_x 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5547 / PTO 5399; LCPH ATI 5548 / PTO 5400
LCPH ATI 6180 / PTO 5957

NSPS Applicability:

A. The New Source Performance Standards (NSPS) Subpart A, General Provisions and Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units shall apply to this source pursuant to LCO 10.9(2)(55) and 567 IAC 23.1(2)"ccc".

Authority for Requirement: LCPH ATI 5547 / PTO 5399; LCPH ATI 5548 / PTO 5400

A. The New Source Performance Standards (NSPS) *Subpart A - General Provisions and Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* shall apply to this source pursuant to LCO 10.9(2)(64) and 567 IAC 23.1(2)(lll).

Authority for Requirement: LCPH ATI 6180 / PTO 5957

Operating Limits:

A. The owner or operator shall meet the standards of 40 CFR §60.42b through 40 CFR §60.44b [NSPS Subpart Db] to comply with LCO 10.9(2)(55).
B. The owner or operator shall meet the testing and emission monitoring procedures of 40 CFR §60.45b through 40 CFR §60.48b [NSPS Subpart Db] to comply with LCO 10.9(2)(55).
C. Fuel in this boiler shall be limited to only natural gas.
D. The owner or operator shall meet the requirements of 40 CFR 60 §§ 1-19 [NSPS Subpart A] to comply with LCO 10.9(2).

Authority for Requirement: LCPH ATI 5547 / PTO 5399; LCPH ATI 5548 / PTO 5400

A. This facility shall meet the monitoring requirements of 40 CFR §60.13 [NSPS Subpart A] to comply with LCO 10.9.2.
B. This facility shall meet the applicable requirements of 40 CFR 60 §40c – §48c [NSPS Subpart Dc to comply with LCO 10.9.2(64).
C. Fuel in this boiler shall be limited to only natural gas.
D. In lieu of source testing and/or installing continuous emission monitors for CO and NOx, the facility shall calculate the hourly emissions using the following vendor derived emission factors for the following pollutants: PM, PM_{10} – 15 lb/mmcf, NO_x – 61.5 lb/mmcf, CO 167 lb/mmcf. These emission factors shall be used to calculate emissions from all gas combusted in the boiler, except as noted below:
   At some boiler firing rates, the NO_x or CO emission factor may be higher. Using the concentration results (ppm) from the most recent boiler tuning, calculate the emission factor using the following equations:
   NO_x (lb/mmcf) = NO_x (ppm) * (20.9/20.9 / 20.9-O_2) * 0.0014 * Heating Value (Btu/scf)
   CO (lb/mmcf) = CO (ppm) * (20.9 / 20.9 – O_2) * 0.000633 * Heating Value (Btu/scf)

If the calculated emission factor is higher than 61.5 lb NO_x/mmcf or 167 lb CO/mmcf, then use the calculated emission factor for the affected range of boiler firing rates.

Authority for Requirement: LCPH ATI 6180 / PTO 5957

Operating Condition Monitoring and Record keeping:

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. Recordkeeping for NSPS Subpart Db shall be done in accordance with 40 CFR §60.49b.
B. Reporting for NSPS Subpart Db shall be done in accordance with 40 CFR §60.49b.
C. Record the amount of natural gas combusted in the boiler on a daily basis.
D. Record the steam output on a daily basis.
E. Maintain fuel supplier certifications of the sulfur content of all fuels burned in accordance with 40 CFR §60.45b(k).
F. The owner or operator shall monitor and record the monthly and 12-month rolling sum emissions for NO_x and CO from EP's 521, 522, 524 and 524A.

Authority for Requirement: LCPH ATI 5547 / PTO 5399; LCPH ATI 5548 / PTO 5400

A. Recordkeeping for NSPS Subpart Dc shall be done in accordance with 40 CFR §60.48c.
B. Reporting for NSPS Subpart Dc shall be done in accordance with 40 CFR §60.48c.
C. The owner or operator shall monitor and record the monthly and 12-month rolling sum emissions for PM_{10}, NO_x and CO from EP's 521, 522, 524 and 524A.
D. The owner or operator shall maintain records of boiler tuning tests, including records of the emission factor calculation.

Authority for Requirement: LCPH ATI 6180 / PTO 5957

Continuous Emission Monitoring: (521 & 522 only)

In accordance with 40 CFR §60.48b(b), the facility shall install, calibrate, maintain, and operate a CEMS on EP521 and EP522, and record the output of the system, for measuring nitrogen oxides (NO_x) emissions discharged to the atmosphere. The system shall be designed to meet 40 CFR 60, Appendix B, Performance Specification 2 (PS2). The specifications of 40 CFR 60, Appendix F, (Quality Assurance Procedures) shall apply. This facility shall meet the requirements of 40 CFR §60.48b for monitoring NO_x emissions.

In accordance with 40 CFR §60.48b(g) the owner or operator of an affected facility that has a heat input capacity of (250 million Btu/hour) or less, and which has an annual capacity factor for natural gas having a nitrogen content of greater than 10 percent (0.10) shall comply with the provisions of paragraphs (b), (c), (d), (e)(2), (e)(3), and (f) of 40 CFR §60.48b.

In accordance with 40 CFR §60.48b(j), units that burn only gaseous fuels with potential sulfur dioxide emission rates of 0.32 lb/MMBtu heat input or less are not required to conduct PM emissions monitoring if they maintain fuel supplier certifications of the sulfur content of the fuels burned.

The facility shall install, calibrate, maintain, and operate a CEMS on EP521 and EP522, and record the output of the system, for measuring carbon monoxide (CO) emissions discharged to the atmosphere. The system shall be designed to meet 40 CFR 60, Appendix B, Performance Specification 4A (PS4A). The specifications of 40 CFR 60, Appendix F, (Quality Assurance Procedures) shall apply.

Authority for Requirement: LCPH ATI 5547 / PTO 5399; LCPH ATI 5548 / PTO 5400

Quarterly Report Requirements:

The following information shall be submitted to this department by the 30th of each month for the previous quarter (January 30, April 30, July 30 and October 30).

1) In accordance with 40 CFR §60.49b(i) a quarterly report containing the information recorded under 40 CFR §60.49b(g) shall be submitted.

2) Submit copies of all fuel supplier certifications obtained during the quarter.
3) Include the monthly and 12-month rolling NOx and CO emissions from EP525 with EP 521, 522 and 524.

Authority for Requirement: LCPH ATI 5547 / PTO 5399; LCPH ATI 5548 / PTO 5400

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
521	5547 / 5399	139	V	54	300	54301
522	5548 / 5400	139	V	54	300	54301
524A	6180 / 5957	42	V	56 x 72	570	36000

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Continuous Emissions Monitoring: (EP's 521 and 522)

Pollutant - NOx
Operational Specifications – 40 CFR Part 60
Date of Initial System Calibration and Quality Assurance – May 13, 2008
Ongoing System Calibration/Quality Assurance – 40 CFR Part 60
Reporting & Record keeping – 40 CFR Part 60
Authority for Requirement – LCO 10.9(2)(a)"55"
LCPH ATI 5547 / PTO 5399
LCPH ATI 5548 / PTO 5400

Pollutant - CO
Operational Specifications – 40 CFR Part 60
Date of Initial System Calibration and Quality Assurance – May 13, 2008
Ongoing System Calibration/Quality Assurance – 40 CFR Part 60
Reporting & Record keeping – LCPH ATI 5547 / PTO 5399 & LCPH ATI 5548 / PTO 5400
Authority for Requirement – LCPH ATI 5547 / PTO 5399
LCPH ATI 5548 / PTO 5400

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: 575, 576, 577

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
575	93-UNLOADSALT1	Salt Tank #1	Salt	30.12 tph	93Y02A	Scrubber
576	93-UNLOADSALT2	Salt Tank #2	Salt	30.12 tph	93Y02B	Scrubber
577	93-UNLOADSALT3	Salt Tank #3	Salt	30.12 tph	93Y02C	Scrubber

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
575,576, 577	PM/PM_{10}	0.077 lb/hr	LCPH ATI 3218 / PTO 3203 LCPH ATI 3216 / PTO 3204 LCPH ATI 3215 / PTO 3205

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
575,576, 577	PM	0.1 gr/dscf	LCPH ATI 3218 / PTO 3203 LCPH ATI 3216 / PTO 3204 LCPH ATI 3215 / PTO 3205 567 IAC 23.3(2)"a"(1) LCO 10.9(1)"a"
	Opacity	20%	LCPH ATI 3218 / PTO 3203 LCPH ATI 3216 /PTO 3204 LCPH ATI 3215 / PTO 3205 LCO 10.7

Operational Limits & Requirements

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

Control Device:

A wet scrubber shall be installed to control particulate matter emissions during all salt truck unloading operations. 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 3218 / PTO 3203; LCPH ATI 3216 / PTO 3204
LCPH ATI 3215 / PTO 3205

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 the date of all salt truck deliveries.
B. Record the number of hours of operation for each salt truck delivery.
C. Monitor and record the fresh water flow rate to the scrubber for each salt truck delivery.

Authority for Requirement: LCPH ATI 3218 / PTO 3203; LCPH ATI 3216 / PTO 3204
LCPH ATI 3215 / PTO 3205

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
575	3218 / 3203	31.5	V	18	70	901 (scfm)
576	3216 / 3204	32	V	18	70	901 (scfm)
577	3215 / 3205	31.9	V	18	70	901 (scfm)

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 582

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
582	94-UNLOADAA	AA Unload and Storage Tank	Acetic Anhydride	54 tph	94Q01	Scrubber – Alkaline
	94-UNLOADHCL	HCL Unload and Storage Tanks	Hydrochloric Acid	22.12 tph		
	95T097201	Ada Unload and Storage Tank	Adipic Anhydride	200 gpm		

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
582	PM/PM_{10}	0.02 lb/hr	LCPH ATI 5701 / PTO 5508
	VOC	0.345 lb/hr	
	SHAP	9.4 tpy [(1)]	
	THAP	24.4 tpy [(1)]	

[(1)] Plant-wide limit to remain minor for 112(g)

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
582	PM	0.1 gr/dscf	LCPH ATI 5701 / PTO 5508 567 IAC 23.3(2)"a"(1) LCO 10.9(1)"a"
	Opacity	20%	LCPH ATI 5701 / PTO 5508 LCO 10.7

Operational Limits & Requirements

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

Control Device:

A packed bed scrubber shall be installed to control HCL and VOC 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 5701 / PTO 5508

Operating Limits:

A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The normal differential pressure across the scrubber shall be maintained between 0.1" – 4.0" w.c.[(1)]
C. The scrubber will maintain a 10 foot deep bed of #1 Tellerette® packaging and an entrainment separator section consisting of 12 inches of #1 Tellerettes®.
D. The pH of the scrubbing liquid shall be no less than 8.

(1) *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*
Authority for Requirement: LCPH ATI 5701 / PTO 5508

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. Monitor and record the differential pressure across the control device on a weekly basis.
B. Monitor and record the pH of scrubbing liquor on a weekly basis.
C. Maintain a record of all maintenance completed on the control device.
D. Maintain material safety data sheet (MSDS) for all chemicals stored in each tank.
Authority for Requirement: LCPH ATI 5701 / PTO 5508

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
582	5701 / 5508	31.9	V	8	70	100 ±10%

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? **Yes** ☒ **No** ☐
Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 685

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
685	95T100B	Reslurry Tank	Starch	8 tph	95BH100A	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
685	PM/PM_{10}	0.42 lb/hr	LCPH ATI 6174 / PTO 5958

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
685	Opacity	20%	LCPH ATI 6174 / PTO 5958 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6174 / PTO 5958 567 IAC 23.4(7) LCO 10.9(1)"g"

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 installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6174 / PTO 5958

Operating Limits:
A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
B. The normal differential pressure across the baghouse shall be maintained between 0.1" – 8.0" w.c.[(1)]

[(1)] *If the indicator is out of range, corrective action will be initiated as soon as possible, but not later than 8 hours from observation of abnormal condition. This does not include periods of startup, shutdown or cleaning of the control equipment.*
Authority for Requirement: LCPH ATI 6174 / PTO 5958

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 the differential pressure across the control device on a weekly basis.
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 maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 6174 / PTO 5958

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
685	6174 / 5958	22	V	14	70	2500

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 741

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
741	67DR619001	Starch Spray Dryer	Starch	5 lbs/hr	67BH619001	BH-DC

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
741	PM/PM_{10}	0.03 lb/hr	LCPH ATI 6697 / PTO 6473
	SHAP	9.4 tpy[(1)]	
	THAP	24.4 tpy[(1)]	

[1] Plant-wide limits to remain an area source

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
741	Opacity	20%	LCPH ATI 6697 / PTO 6473 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6697 / PTO 6473 567 IAC 23.4(7) LCO 10.9(1)"g"

Operational Limits & Requirements

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

Control Device:

Cartridge filters shall be installed 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control equipment at all times.

Authority for Requirement: LCPH ATI 6697 / PTO 6473

Operating Limits:

A. The control equipment shall be maintained according to the manufacturer's specifications and good operating practices.

Authority for Requirement: LCPH ATI 6697 / PTO 6473

Operating Condition Monitoring and Recordkeeping:

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of 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. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain a record of all maintenance completed on the control equipment.

Authority for Requirement: LCPH ATI 6697 / PTO 6473

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
741	6697 / 6473	42.6	V	6	115	36.5

The temperature and flow rates are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature or flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator 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.

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

Relevant requirements of O & M plan for this equipment: PM

See Plant-Wide Monitoring Section for Agency O & M Plan.

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: 752

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
752	67-R&D	R&D Scrubber	Starch & Ethanol	1 each/hr	67Q10	Scrubber

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.

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
752	PM/PM_{10}	0.05 gr/dscf; 0.34 lb/hr	LCPH ATI 6014 / PTO 5743
	VOC	60.9 lb/batch; 2.89 tpy	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
752	PM	0.1 gr/dscf	LCPH ATI 6014 / PTO 5743 567 IAC 23.3(2)"a"(1) LCO 10.9(1)"a"
	Opacity	20%	LCO 10.7

Operational Limits & Requirements

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

Control Device:

A wet scrubber shall be installed to control VOC 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 condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 6014 / PTO 5743

Operating Limits:

A. The total number of batches shall be limited to 95 based on a 12-month rolling total.
B. The total liquor flow rate in the scrubber shall be no less than 80 gpm.
C. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.

Authority for Requirement: LCPH ATI 6014 / PTO 5743

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 the number of batches processed on a monthly and 12-month rolling total basis.
B. Monitor and record the total liquor flow in the scrubber at least once during each batch produced.
C. Maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 6014 / PTO 5743

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
752	6014 / 5743	30	H	8	70	800

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Relevant requirements of O & M plan for this equipment: PM
See Plant-Wide Monitoring Section for Agency O & M Plan.

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

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

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22 and Linn County Code of Ordinance (LCCO) 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 LCCO 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 LCCO 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 LCCO 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 LCCO 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) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

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

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

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

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

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
ii. The estimated quantity of the excess emission.
iii. The time and duration of the excess emission.
iv. The cause of the excess emission.
v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
vi. The steps that were taken to limit the excess emission.
vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4) and LCCO 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), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.
    a. An administrative permit amendment is a permit revision that does any of the following:
        i. Correct typographical errors
        ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
        iii. Require more frequent monitoring or reporting by the permittee; or
        iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
    b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
    c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.
2. Minor Title V Permit Modification.
    a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
        i. Do not violate any applicable requirement;
        ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
        iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
        iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

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

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
   i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
   ii. The permittee's suggested draft permit;
   iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
   iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

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

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

G19. Duty to Obtain Construction Permits

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

this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

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

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
    a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
    b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
    c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
    d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
    a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
    b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
    c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
    d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
    e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
    f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a

notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
    a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
    b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
    c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
    a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
    b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
    c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
    d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
    e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*
5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

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

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

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

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
   a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
   b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
   c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
   d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8) and LCCO 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 LCCO 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 26th Ave Ct. SW
Cedar Rapids, IA 52404
(319) 892-6000

V. APPENDIX A

40 CFR part 60 Subpart Db - *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*

A link to the current final rule can be found at the link below:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=e7ec1c093caf236240bc76aae014e00e&rgn=div6&view=text&node=40:6.0.1.1.1.11&idno=40

40 CFR part 60 Subpart Dc - *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

A link to the current final rule can be found at the link below:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=e7ec1c093caf236240bc76aae014e00e&rgn=div6&view=text&node=40:6.0.1.1.1.12&idno=40

40 CFR part 60 Subpart Kb - *Standards of Performance for Volatile Organic Liquid Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after July 23, 1984*

A link to the current final rule can be found at the link below:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=c2c93546747f0d107420ab3f61fa9729&rgn=div6&view=text&node=40:6.0.1.1.1.25&idno=40

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 at the link below:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=c2c93546747f0d107420ab3f61fa9729&rgn=div6&view=text&node=40:6.0.1.1.1.61&idno=40

40 CFR part 60 Subpart IIII - *Standards of Performance for Stationary Compression Ignition Engines*

A link to the current final rule can be found at the link below:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=69af4864b732ae63b887dc220a45aea8&rgn=div6&view=text&node=40:6.0.1.1.1.99&idno=40

A listing of all the 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 at the link below:
http://www.epa.gov/region7/air/nsps/nsps_standard_contacts.htm

40 CFR 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 at the link below:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div6&view=text&node=40:13.0.1.1.1.1&idno=40

40 CFR 63 Subpart BBBBBB – *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities.*

A link to the current final rule can be found at the link below:
http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=d8149ea9b5c046d5b5e20c0218b03809;rgn=div6;view=text;node=40%3A14.0.1.1.1.15;idno=40;cc=ecfr

A listing of all the promulgated MACT rules, EPA Region 7 staff contact information (for questions pertaining to the rule), compliance assistance links and a link to each MACT can be found at the link below:
http://www.epa.gov/region07/air/toxics/mact_standard_contacts.htm