

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

Name of Permitted Facility: Cargill, Incorporated

Facility Location: 1710 16th Street SE

Cedar Rapids, IA 52401

Air Quality Operating Permit Number: 07-TV-006R1

Expiration Date: October 31, 2018

Permit Renewal Application Deadline: April 30, 2018

EIQ Number: 92-9020

Facility File Number: 57-01-004

Responsible Official

Name: Christina M. Venne

Title: Facility Manager

Mailing Address: 1710 16th Street SE, Cedar Rapids, IA 52401

Phone #: (319) 399-2111

Permit Contact Person for the Facility

Name: Marc Tucker

Title: EHS Environmental Coordinator

Mailing Address: 1710 16th Street SE, Cedar Rapids, IA 52401

Phone #: (319) 399-6149

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

For the Director of the Department of Natural Resources



Lori Hanson, Supervisor of Air Operating Permits Section

11/1/13

Date

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Abbreviations

acfm	actual cubic feet per minute
ATI	authorization to install
CFR.....	Code of Federal Regulation
CE	control equipment
CEM	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP	emission point
EU	emission unit
gph	gallon per hour
gpm	gallon per minute
gr./dscf	grains per dry standard cubic foot
gr./100 cf	grains per one hundred cubic feet
H	Horizontal discharge
ICA	Industrial Clean Air
IAC	Iowa Administrative Code
IDNR	Iowa Department of Natural Resources
LCPH	Linn County Public Health
LCO.....	Linn County Ordinance
MVAC.....	motor vehicle air conditioner
NSPS	new source performance standard
NAICS	North American Industry Classification System
N/A	not applicable
ppmv	parts per million by volume
lb./hr	pounds per hour
lb./MMBtu	pounds per million British thermal units
PO	propylene oxide
PTO.....	permit to operate
scfm	standard cubic feet per minute
SIC	Standard Industrial Classification
tph	tons per hour
tpy	tons per year
USEPA.....	United States Environmental Protection Agency
V.....	Vertical (without rain cap or with unobstructing rain cap)

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC	volatile organic compound
CO.....	carbon monoxide
HAP	hazardous air pollutant
VHAP	volatile hazardous air pollutant
SHAP	single hazardous air pollutant
THAP	total hazardous air pollutant
TVHAP	total volatile hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: **Cargill, Incorporated**

Permit Number: **07-TV-006-R1**

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

Equipment List By Process Group

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
UTILITIES (Process Group 1)			
72	72-CB	Coal Fired Boiler	5663 / 5811
	72-BI	Coal Boiler Igniters	
75	75	ICA Baghouse	6130 /
76	76	South Ash Storage Silo	963 / 910
77	77	North Ash Storage Silo	964 / 911
101	101	#2 Gas Boiler	5497 / 5322
111	111	Coal Convey Aspiration	5669 / 5676
142	142	Generator 2	--
210	210	Emergency Generator	6123 / 6084
258	258	500 kW Back-up Generator	6215 / 6085
516	516	Refinery Loadout Boiler	--
REFINERY (Process Group 2)			
32	32	Carbon Furnace	4325 / 4311
	32B	Carbon Furnace Burner	
33	33	Refinery Process Tanks	6378 / 6116
256	256	Precoat Bin	5785 / 5563
PROCESS (Process Group 3)			
11	11	Corn Truck Unload	6068 / 5794
12	12	Gluten Sizing System	6242 / 6039
13	13A	Feedhouse Truck Loadout	5674 / 5681
	13B	Rail Gluten/Germ Loadout System	
14	14A	Gluten Scale	5675 / 5682
	14B	Gluten Conveying	
15	15	East Germ Storage Bin	5512 / 5560
16	16	West Germ Storage Bin	5513 / 5561
17	17	West Gluten Bin	5514 / 5562
20	20A	Germ Dryer Burner	5125 / 5133
	20B	Feed Drying System	
	20C	Germ Dryer Sections 1-4	
	20D	Evaporator	
	20E	Germ Rotary Cooler	
	20F	Bran Dewatering Presses	
37	37	Corn Cleaning / Convey	3181 / 4206
40	40A	Mill Aspiration System	4230 / 4309
	40B	Gluten Tank	
	40C	Clarifier Feed Tank	
	40D	Primary Feed Tank	
	40E	Clarifiers	
	40F	MST Feed Tank	

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
	40G	Millwater Tank	
41	41	Steep House Scrubber	6034 / 5761
68	68	Cracked Corn Hammermill	5881 / 5582
109	109	Gluten Filter Vent	4232 / 4312
113	113	Germ Fluid Bed Dryer Section 5	4223 / 4209
130	130	#3 Corn Storage Silo	6069 / 5795
176	176A	Waxy Corn Silo #1	4330 / 4469
	176B	Waxy Corn Silo #2	
230	230	Cracked Corn Conveying	4720 / 4785
245	245	East Gluten Bin	4998 / 5034
246	246	Dried Gluten Receiver	5173 / 5146
247	247	Wetbran Conveyor	5475 / 5236
249	249	East Gluten Filter Vacuum Pump	5337 / 5217
250	250	Middle Gluten Filter Vacuum Pump	5643 / 5397
251	251	West Gluten Filter Vacuum Pump	5644 / 5398
252	252	Starch Slurry Tank #7	5344 / 5673
253	253	EFA Process	5426 / 5675
255	255	Rail Germ Loadout & Conveying	5676 / 5440
259	259	EFA Soy Hull Unload	6024 / 5916
FOOD STARCH (Process Group 4)			
6	6	#5 Starch Bulk Storage	4460 / 4476
7	7	#6 Starch Bulk Storage	2247 / 2163
8	8	#7 Starch Bulk Storage	4461 / 4477
26	26	#2 Starch Bulk Storage	2243 / 2159
27	27	#3 Starch Bulk Storage	4558 / 4618
28	28	#4 Starch Bulk Storage	2245 / 2161
43	43	Vacuum Cleaner Vent	5462 / 5443
51	51A	Packer Pulsaire	5417 / 5235
	51B	Industrial Starch Packer Web	
	51C	Packers 5 & 6	
	51D	A & B Bins	
52	52	#1 Starch Bulk Storage	4559 / 4619
58	58	Food Grade Truck	6243 / 6040
65	65	Starch Loadout	2139 / 2246
84	84	#9 Starch Bulk Storage	1709 / 1426
149	149	Starch Bulk Bagger	2977 / 3662
254	254	Slurry Tank #5	5416 / 5674
390	390	Food Starch Sifter	6395 /
INDUSTRIAL STARCH (Process Group 5)			
1	1	#3 Starch Flash Dryer	6241 / 6038
5	5	Bulk Soda Ash Loadout	4879 / 4872
9	9	C* Starch Bin #8	5460 / 5441
61	61	Mod House Heil Wet Scrubber	204 / 121
70	70A	Starch Modification Tank 1	4380 / 4447
	70B	Starch Modification Tank 2	
	70C	Starch Washer 1	
	70D	Starch Washer 2	
	70E	Soda Ash Storage Tank 3	
71	71A	Tank 9	4723 / 4811
	71B	Tank 10	
	71C	Tank 12	
	71D	Tank 14	

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
	71E	Tank 15	
	71F	Tank 16	
	71G	Tank 17	
79	79	Industrial Starch Loadout	5463 / 5345
85	85	#10 Starch Bulk Storage Bin	5464 / 5444
90	90	Starch Flash Dryer #4	2452 / 2497
91	91	#11 Starch Storage Bin	2447 / 2410
92	92	#12 Starch Storage Bin	2446 / 2409
93	93	#13 Starch Storage Bin	2445 / 2408
94	94	#18 Industrial Starch Storage Bin	5465 / 5445
95	95	Starch Surge Bin	2475 / 2416
102	102	#14 Starch Storage Bin	2563 / 2559
103	103	C* Film Vertical Bin #15	5466 / 5446
104	104	#16 Starch Storage Bin	2565 / 2558
105	105	Starch Storage Bin	2566 / 2556
155	155	Industrial Grade Packer / Blower	3715 / 4212
300	300	C* Film Starch Receiving Filter/Starch Hopper	5456 / 5447
320	320	Dryer	5043 / 5583
330	330	Modified Starch Receiving Filter	5044 / 5448
340	340	Sifter	5045 / 5449
350	350	C* Film Final Product Hopper	5457 / 5450
360	360	Product Receiving Filter	5047 / 5451
370	370	C* Film Loadout Surge Hopper	5458 / 5452
380	380	C* Cooling Tower	5459 / 5453
LAB (Process Group 6)			
SPECIALTY STARCH (Process Group 7)			
115	115	Loadout Dust Collector	2739 / 3668
116	116	Starch Dryer	2992 / 3669
	116B	Starch Dryer Burner	
118	118	Salt Storage Bin Vent	4276 / 4264
119	119	#19 Starch Bulk Storage	6392 /
120	120	#20 Starch Storage Bin	6393 /
121	121	#21 Starch Storage Bin	6394 /
124	124	Packer Hopper Vent	4457 / 4478
153	153	Sodium Sulfate Receiving	5677 / 5439
160	160A	PO Storage Tank	5876 / 5740
	160C	Reactor #131	
	160D	Reactor #132	
	160E	Reactor #134	
	160F	Reactor #135	
	160H	Stripper #2	
161	161A	POCl ₃ Storage Tank	5319 / 5205
	161B	H ₂ SO ₄ Storage Tank	
	161C	Deactivation Tank	
	161D	Modification Tank #101	
	161E	Modification Tank #102	
	161F	Modification Tank #103	
	161G	Modification Tank #104	
	161H	nOSA Tank	
161I	Modification Tank #105		
162	162	Flash Dryer #6	4274 / 4460

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
	162B	Flash Dryer #6 Burner	
164	164	Storage Bin #104	4026 / 4461
165	165	Storage Bin #105	4027 / 4462
166	166	Storage Bin #106	4028 / 4463
167	167	Specialty Starch Bin #107	5320 / 5580
169	169	Specialty Starch Bin #109	5321 / 5581
170	170	Storage Bin Surge Hopper	4269 / 4464
171	171	Specialty Starch Mix Bin 1	4270 / 4465
173	173	Packer / Clean-up Vacuum	4456 / 4466
174	174	Grinder Discharge Receiver	4272 / 4467
175	175	Warehouse Vacuum Receiver	4273 / 4468
240	240	Starch Re-Slurry System	4855 / 4862
248	248	Slurry Tank #6	5137 / 5100
260	260	East Dilute Phase Pot	6380 / 6099

Equipment List By Emission Point

Emission Point Number	Emission Unit Number	Emission Unit Description	Process Area	Page
1	1	#3 Starch Flash Dryer	Industrial Starch	14
5	5	Bulk Soda Ash Loadout	Food Starch	19
6	6	#5 Starch Bulk Storage	Food Starch	21
7	7	#6 Starch Bulk Storage	Food Starch	21
8	8	#7 Starch Bulk Storage	Food Starch	21
9	9	#8 Starch Bulk Storage	Food Starch	21
11	11	Corn Truck Unload	Process	24
12	12	Gluten Sizing System	Process	24
13	13A	Feedhouse Truck Loadout	Process	26
	13B	Rail Gluten/Germ Loadout System		
14	14A	Gluten Scale	Process	26
	14B	Gluten Conveying		
15	15	East Germ Storage Bin	Process	26
16	16	West Germ Storage Bin	Process	26
17	17	West Gluten Storage Bin	Process	26
20	20A	Germ Dryer Burner	Process	32
	20B	#1 & #2 Gluten Steam Tube Dryer		
	20C	Germ Dryer Sections 1-4		
	20D	Evaporator		
	20E	Germ Rotary Cooler		
	20F	Bran Dewatering Presses		
26	26	#2 Starch Bulk Storage	Food Starch	35
27	27	#3 Starch Bulk Storage	Food Starch	35
28	28	#4 Starch Bulk Storage	Food Starch	35
32	32	Carbon Furnace	Refinery	38
	32B	Carbon Furnace Burner		
33	33	Refinery Process Tanks	Refinery	43
37	37	Corn Cleaning / Convey	Process	45
40	40	Mill House Scrubber	Process	47
41	41	Steep House Scrubber	Process	47
43	43	Vacuum Cleaner Vent	Food Starch	55

Emission Point Number	Emission Unit Number	Emission Unit Description	Process Area	Page
51	51A	Packer Pulsaire	Food Starch	57
	51B	Industrial Starch Packer Web		
	51C	Packers 5 & 6		
	51D	A & B Bins		
52	52	#1 Starch Bulk Storage	Food Starch	59
58	58	Food Grade Truck	Food Starch	61
61	61	Mod House Heil Wet Scrubber	Industrial Starch	63
65	65	Starch Loadout	Food Starch	65
68	68	Cracked Corn Hammermill	Process	67
70	70A	Starch Modification Tank 1	Industrial Starch	69
	70B	Starch Modification Tank 2		
	70C	Starch Washer 1		
	70D	Starch Washer 2		
	70E	Soda Ash Storage Tank 3		
71	71A	Tank 9	Industrial Starch	71
	71B	Tank 10		
	71C	Tank 12		
	71D	Tank 14		
	71E	Tank 15		
	71F	Tank 16		
	71G	Tank 17		
72	72-CB	Coal Fired Boiler	Utilities	73
	72-BI	Coal Boiler Igniters		
75	75	ICA Baghouse	Utilities	80
76	76	South Ash Storage Silo	Utilities	82
77	77	North Ash Storage Silo	Utilities	82
79	79	Industrial Starch Loadout	Industrial Starch	83
84	84	#9 Starch Bulk Storage	Food Starch	86
85	85	#10 Starch Bin	Food Starch	86
90	90	Starch Ring Flash Dryer	Industrial Starch	88
91	91	#11 Starch Storage Bin	Industrial Starch	93
92	92	#12 Starch Storage Bin	Industrial Starch	93
93	93	#13 Starch Storage Bin	Industrial Starch	93
94	94	#18 Starch Storage Bin	Industrial Starch	93
95	95	Starch Surge Bin	Industrial Starch	93
101	101	#2 Gas Boiler	Utilities	96
102	102	#14 Starch Storage Bin	Industrial Starch	100
103	103	#15 Starch Storage Bin	Industrial Starch	100
104	104	#16 Starch Storage Bin	Industrial Starch	100
105	105	Starch Storage Bin	Industrial Starch	100
109	109	Gluten Filter Vent	Process	103
111	111	Coal Convey Aspiration	Utilities	104
113	113	Germ Fluid Bed Dryer Section 5	Process	107
115	115	Loadout Dust Collector	Specialty Starch	109
116	116	Starch Dryer	Specialty Starch	111
	116B	Starch Dryer Burner		
118	118	Salt Storage Bin Vent	Specialty Starch	116
119	119	#19 Starch Bulk Storage	Specialty Starch	118
120	120	#20 Starch Storage Bin	Specialty Starch	118
121	121	#21 Starch Storage Bin	Specialty Starch	118
124	124	Packer Hopper Vent	Specialty Starch	120
130	130	#3 Corn Storage Silo	Process	122

Emission Point Number	Emission Unit Number	Emission Unit Description	Process Area	Page
142	142	Generator 2	Utilities	124
149	149	Starch Bulk Bagger	Food Starch	125
153	153	Sodium Sulfate Receiving	Specialty Starch	127
155	155	Industrial Grade Packer / Blower	Industrial Starch	129
160	160A	PO Storage Tank	Specialty Starch	132
	160C	Reactor #131		
	160D	Reactor #132		
	160E	Reactor #134		
	160F	Reactor #135		
	160H	Stripper #2		
161	161A	POCl3 Storage Tank	Specialty Starch	134
	161B	Sulfuric Acid Storage Tank		
	161C	Deactivation Tank		
	161D	Modification Tank #101		
	161E	Modification Tank #102		
	161F	Modification Tank #103		
	161G	Modification Tank #104		
	161H	nOSA Tank		
162	162	Flash Dryer #6	Specialty Starch	136
	162B	Flash Dryer #6 Burner		
164	164	Storage Bin #104	Specialty Starch	141
165	165	Storage Bin #105	Specialty Starch	141
166	166	Storage Bin #106	Specialty Starch	141
167	167	Specialty Starch Storage Bin #107	Specialty Starch	143
169	169	Specialty Starch Storage Bin #109	Specialty Starch	143
170	170	Storage Bin Surge Hopper	Specialty Starch	145
171	171	Specialty Starch Mix Bin 1	Specialty Starch	145
173	173	Packer / Clean-up Vacuum	Specialty Starch	145
174	174	Grinder Discharge Receiver	Specialty Starch	145
175	175	Warehouse Vacuum Receiver	Specialty Starch	145
176	176A	Waxy Corn Silo #1	Process	148
	176B	Waxy Corn Silo #2		
210	210	Emergency Generator	Utilities	150
230	230	Cracked Corn Conveying	Process	153
240	240	Starch Re-Slurry System	Specialty Starch	155
245	245	East Gluten Storage Bin	Process	157
246	246	Dried Gluten Receiver	Process	159
247	247	Wet Bran Conveyor	Process	161
248	248	Slurry Tank #6	Specialty Starch	162
249	249	East Gluten Filter Vacuum Pump	Process	163
250	250	Middle Gluten Filter Vacuum Pump	Process	163
251	251	West Gluten Filter Vacuum Pump	Process	163
252	252	Starch Slurry Tank #7	Specialty Starch	164
253	253	EFA Process	Process	165
254	254	Slurry Tank #5	Specialty Starch	167
255	255	Rail Germ Loadout & Conveying	Process	168
256	256	Precoat Bin	Refinery	170
258	258	500 kW Back-up Generator	Utilities	172
259	259	EFA Soy Hull Unload	Process	175
260	260	East Dilute Phase Pot	Specialty Starch	177
300	300	C* Film Starch Receiving Filter / Starch	Industrial Starch	179

Emission Point Number	Emission Unit Number	Emission Unit Description	Process Area	Page
		Hopper		
320	320	Dryer	Industrial Starch	181
330	330	Modified Starch Receiving Filter	Industrial Starch	183
340	340	Sifter	Industrial Starch	183
350	350	C* Film Final Product Hopper	Industrial Starch	183
360	360	Product Receiving Filter	Industrial Starch	183
370	370	C* Film Loadout Surge Hopper	Industrial Starch	183
380	380	C* Cooling Tower	Industrial Starch	186
390	390	Food Starch Sifter	Food Starch	188
516	516	Refinery Loadout Boiler	Utilities	190

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
IU-10	Aspiration of Sewer Pit
IU-35	Vacuum Filter Pumps
IU-69	Cracked Corn Conveying
IU-144	PO Storage Safety Valve
IU-145	PO Batch Tank Valve
IU-148	93% Sulfuric Acid Tank
IU-501	500 Gallon Fuel Oil Tank
IU-502	500 Gallon Diesel Tank
IU-503	55 Gallon Diesel Tank
IU-504	Refinery Drum Filter Hood
IU-505	Gluten Drum Filter Vac Pumps (Fugitive)
IU-508	Starch Mod Tank #15
IU-509	Starch Mod Tank #16
IU-510	Starch Mod Tank #17
IU-511	Refinery HCL Tank
IU-512	Specialty Mod Tank (101)
IU-513	Mod House Sewer Vent
IU-514	Sewage Drum Vacuum Pump

II. Plant-Wide Conditions

Facility Name: Cargill, Incorporated
Permit Number: **07-TV-006-R1**

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

Permit Duration

The term of this permit is: Five years
Commencing on: November 1, 2013
Ending on: October 31, 2018

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

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 (SO₂): 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 - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be

used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

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

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

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

Consent Decree

On March 3, 2006, the Federal District Court in Minnesota entered a Consent Decree between Cargill, Incorporated, U.S. EPA, Iowa Department of Natural Resources and other participating agencies. U.S. et al v. Cargill, Incorporated Civil Action Number 05-2037JMR/FLN. This consent decree is hereby incorporated in its entirety into this permit. During the effective period of the Consent Decree, Cargill shall comply with the specific emission reduction requirements, and any other applicable requirements specified in the Consent Decree and applicable to this facility. Where a conflict exists, these requirements shall supersede and control over corresponding terms and conditions of this permit. A copy of this Consent Decree is included as Appendix A of this permit.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN
567 IAC 22.108(1)

III. Emission Point-Specific Conditions

Facility Name: Cargill, Incorporated
 Permit Number: 07-TV-006-R1

Process Group 5 (Industrial Starch):

Emission Point ID Number: 1

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
1	1	#3 Starch Flash Dryer	Non-oxidized starch	10 tph	CE-1	Wet Scrubber
	1A		Oxidized starch	45 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
1	Opacity	20%	LCPH ATI 6241 / PTO 6038 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6241 / PTO 6038 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO ₂	500 ppmv	LCPH ATI 6241 / PTO 6038 567 IAC 23.3(3)"e" LCO 10.12(2)

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 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 6241 / PTO 6038

Operating Limits:

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 or their authorized representatives.

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The normal pressure differential across the wet scrubber shall be maintained between 6" to 24" w.c.
- C. The recirculation water flow rate in the wet scrubber shall be maintained at a minimum of 150 gpm.

D. The owner or operator shall produce no more than 105,000 tons of oxidized starch per rolling 12-month period.

Authority for Requirement: LCPH ATI 6241 / PTO 6038

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 or their authorized representatives.

- A. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly 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 records of all maintenance completed on the control device.
- C. The owner or operator shall monitor and record the differential pressure across the control device on a weekly basis.
- D. The owner or operator shall monitor and record the recirculation water flow rate in the control device on a weekly basis.
- E. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

Authority for Requirement: LCPH ATI 6241 / PTO 6038

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)
1	6241 / 6038	60	V	50.4	106	55003

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

**Compliance Assurance Monitoring Plan
Packed Bed Scrubber for VOC Control
Emission Point 001**

I. Background

A. Emissions Unit

Description: #3 Starch Flash Dryer
Identification: EU-1
Facility: Cargill, Inc.

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No: LCPH PTO 6038
Emission limits: VOC: 1.46 lb/ton (oxidized starch); 105,000 ton/year (oxidized starch); 3.76 lb/hr (non-oxidized starch)

C. Control Technology Packed Bed Scrubber

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment indicators: scrubber recirculation flow rate and scrubber pressure differential. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance, if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range during normal operations, not including startup and shutdown events. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion must be reported in the Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

1. Indicator	Scrubber water recirculation rate	Pressure Differential
Measurement Approach	Daily inspection of scrubber water recirculation rate	Daily inspection of pressure differential across scrubber
2. Indicator Range	An excursion is defined as a scrubber recirculation rate less than 120 gpm. Excursions trigger an inspection, corrective action and a recordkeeping requirement.	An excursion is defined as a pressure differential reading less than 6" w.c. Excursions trigger an inspection, corrective action and a recordkeeping requirement.
3. Performance Criteria		
A. Data Representativeness	An observation of the recirculation rate below 120 gpm could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC emissions if corrective actions are not initiated.	An observation of pressure differential less than 6" w.c. at the scrubber could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC emissions if corrective actions are not initiated.
B. Recordkeeping and Reporting (Verification of Operational Status)	Daily flow rate readings Record any excursions and corrective actions, inspections and maintenance resulting from readings outside the indicator range.	Daily pressure differential readings. Record any excursions and corrective actions, inspections and maintenance resulting from the inspection.
C. QA/QC Practices and Criteria	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.
D. Monitoring Frequency	The recirculation flow rate will be monitored on a daily basis when the scrubber is operating.	The scrubber pressure differential will be monitored on a daily basis when the scrubber is operating.
E. Data Collection Procedures	The recirculation flow rate is recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.	Scrubber pressure differential readings are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.
F. Averaging Period	None	None

III. Justification

A. Background

The pollutant specific emission unit is #3 starch flash dryer. Daily scrubber operating requirements include monitoring and evaluations of various parameters, recordkeeping, preventative maintenance, and the appropriate response to any malfunctions.

B. Rationale for Selection of Performance Indicator

Recirculation flow rate monitoring was selected as the performance indicator because it is indicative of operation of the scrubber in a manner necessary to comply with the VOC emission standard. A recirculation flow rate is less than 120 gpm is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of minimal recirculation flow rate is used as a performance indicator.

Scrubber pressure differential was selected as the secondary performance indicator. A pressure differential less than 6" w.c. is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of excessive pressure differential drop is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The ranges selected are a reflection of historical normal operating conditions for the scrubber. The changes in recirculation rate and pressure differential were selected as the indicator range because a recirculation rate less than 120 gpm and a pressure differential less than 6" w.c. are indicative of a potential increase in VOC emissions due to a decrease in the performance of this scrubber. If the scrubber is operating properly, the recirculation rate and pressure differential will be within the identified range, except during periods of startup, shutdown, or upset conditions.

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 5

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
5	5	Bulk Soda Ash Storage Tank	Soda Ash	24 tph	CE-5	Baghouse

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
5	PM ₁₀	0.01 gr/dscf	LCPH ATI 4879 / PTO 4872

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
5	Opacity	20%	LCPH ATI 4879 / PTO 4872 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4879 / PTO 4872 567 IAC 23.3(2)"a"(2) 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 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 "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 4879 / PTO 4872

Operating Limits:

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

Authority for Requirement: LCPH ATI 4879 / PTO 4872

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 or 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 '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 4879 / PTO 4872

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)
5	4879 / 4872	55.2	H	4 x 5	70	1120

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 4 (Food Starch):

Emission Point ID Number: 6, 7, 8, 9

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
6	6	#5 Starch Bulk Storage Bin	Cornstarch	12.5 tph	CE-6	Baghouse
7	7	#6 Starch Bulk Storage Bin	Cornstarch	12.5 tph	CE-7	Baghouse
8	8	#7 Starch Bulk Storage Bin	Cornstarch	12.5 tph	CE-8	Baghouse
9	9	C* Starch Bin #8	Cornstarch	7 tph	CE-9	Bin Vent

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
6	PM/PM ₁₀	0.05 gr/dscf, 0.64 lb/hr	LCPH ATI 4460 / PTO 4476
	VOC	0.24 lb/hr; 1.07 tpy	
	THAP	0.06 lb/hr	
7	VOC	0.24 lb/hr; 1.06 tpy	LCPH ATI 2247 / PTO 2163
	THAP	0.06 lb/hr	
8	PM/PM ₁₀	0.05 gr/dscf, 0.64 lb/hr	LCPH ATI 4461 / PTO 4477
	VOC	0.24 lb/hr; 1.07 tpy	
	THAP	0.06 lb/hr	
9	PM/PM ₁₀	0.15 lb/hr	LCPH ATI 5460 / PTO 5441
	VOC	0.24 lb/hr; 1.07 tpy	
	THAP	0.06 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
6, 7 8, 9	Opacity	20%	LCPH ATI 4460 / PTO 4476 LCPH ATI 2247 / PTO 2163 LCPH ATI 4461 / PTO 4477 LCPH ATI 5460 / PTO 5441 LCPH ATI / PTO LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4460 / PTO 4476 LCPH ATI 2247 / PTO 2163 LCPH ATI 4461 / PTO 4477 LCPH ATI 5460 / PTO 5441 LCPH ATI / PTO 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 requirement listed below.

Control Device:

A fabric filter dust collector (Mikropul / Mikro-Pulaire 25-S-6-30 fabric filter dust collector (EP6 and EP8)) (bin vent filter (EP9)) 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 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 4460 / PTO 4476
LCPH ATI 2247 / PTO 2163
LCPH ATI 4461 / PTO 4477
LCPH ATI 5460 / PTO 5441

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 4460 / PTO 4476
LCPH ATI 2247 / PTO 2163
LCPH ATI 4461 / PTO 4477
LCPH ATI 5460 / PTO 5441

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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 4460 / PTO 4476
LCPH ATI 2247 / PTO 2163
LCPH ATI 4461 / PTO 4477
LCPH ATI 5460 / PTO 5441

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)
6	4460 / 4476	72.9	V	8	72	1790
7	2247 / 2163	64.1	V	5.52 x 8.04	72	1790
8	4461 / 4477	72.8	V	8	72	1790
9	5460 / 5441	64.09	V	5.52 x 8.04	72	1790

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.

Opacity Monitoring (EP's 6, 7, 8 and 9):

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are

observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required.

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 11

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
11	11	Corn Truck Unload	Corn	600 tph	CE-11	Baghouse

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	0.005 gr/dscf; 0.413 lb/hr	LCPH ATI 6068 / PTO 5794

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
11	Opacity	20%	LCPH ATI 6068 / PTO 5794 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6068 / PTO 5794 567 IAC 23.3(2)"a"(2) 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 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 "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 6068 / PTO 5794

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.
- C. This emission unit shall be limited to 5,840 hours of operation based on a rolling 12-month total.

Authority for Requirement: LCPH ATI 6068 / PTO 5794

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 records of all maintenance completed on the control device.

D. The owner or operator shall monitor and record the hours of operation on a monthly and 12-month rolling basis.
 Authority for Requirement: LCPH ATI 6068 / PTO 5794

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	6068 / 5794	50	V	21.9	Ambient	10224

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

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

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 12, 13, 14, 15, 16, 17

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
12	12	Gluten Sizing System	Gluten	9.375 tph	CE-12	Baghouse
13	13A	Truck Gluten / Germ Loadout	Gluten, Germ	135 tph (commercial basis)	CE-13	Baghouse
	13B	Rail Gluten Loadout				
14	14A	Gluten Scale	Gluten, Germ	135 tph (commercial basis)	CE-14	Baghouse
	14B	Gluten Conveying				
15	15	East Germ Bin	Germ	15,000 lb/hr	CE-15	Baghouse
16	16	West Germ Bin	Germ	15,000 lb/hr	CE-16	Baghouse
17	17	West Gluten Bin	Gluten	11,000 lb/hr	CE-17	Baghouse

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
12	PM/PM ₁₀	0.39 lb/hr	LCPH ATI 6242 / PTO 6039
	VOC	0.61 lb/hr; 2.66 tpy	
	THAP	0.15 lb/hr	
13	PM/PM ₁₀	3.25 lb/hr	LCPH ATI 5674 / PTO 5681
	VOC	5.80 lb/hr; 25.39 tpy	
	THAP	1.45 lb/hr	
14	PM/PM ₁₀	0.20 lb/hr	LCPH ATI 5675 / PTO 5682
	VOC	0.61 lb/hr; 2.66 lb/hr	
	THAP	0.15 lb/hr	
15, 16	PM/PM ₁₀	0.09 lb/hr	LCPH ATI 5512 / PTO 5560 LCPH ATI 5513 / PTO 5561
	VOC	0.14 lb/hr; 0.61 tpy	
	THAP	0.03 lb/hr	
17	PM/PM ₁₀	0.10 lb/hr	LCPH ATI 5514 / PTO 5562
	VOC	0.16 lb/hr; 0.68 tpy	
	THAP	0.04 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
12,13,14, 15,16,17	Opacity	20%	LCPH ATI 6242 / PTO 6039 LCPH ATI 5674 / PTO 5681 LCPH ATI 5675 / PTO 5682 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6242 / PTO 6039 LCPH ATI 5674 / PTO 5681 LCPH ATI 5675 / PTO 5682 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 emissions. The control equipment shall be maintained on this source in a good operating condition at all times. All appropriate probes and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed and maintained in good operating condition.

Authority for Requirement: LCPH ATI 6242 / PTO 6039
 LCPH ATI 5674 / PTO 5681
 LCPH ATI 5675 / PTO 5682
 LCPH ATI 5512 / PTO 5560
 LCPH ATI 5513 / PTO 5561
 LCPH ATI 5514 / PTO 5562

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.
- C. This unit shall be limited to 5,840 hours of operation based on a rolling 12-month total. **(EP13 and EP14 only)**

Authority for Requirement: LCPH ATI 6242 / PTO 6039
 LCPH ATI 5674 / PTO 5681
 LCPH ATI 5675 / PTO 5682
 LCPH ATI 5512 / PTO 5560
 LCPH ATI 5513 / PTO 5561

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 records of all maintenance completed on the control device.
- D. Monitor and record the hours of operation on a monthly basis and apply it to a 12-month rolling total. **(EP13 and EP14 only)**

Authority for Requirement: LCPH ATI 6242 / PTO 6039
 LCPH ATI 5674 / PTO 5681
 LCPH ATI 5675 / PTO 5682
 LCPH ATI 5512 / PTO 5560
 LCPH ATI 5513 / PTO 5561

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)
12	6242 / 6039	70	V	12	70	4425
13	5674 / 5681	53.8	V	39.96	70	28534
14	5675 / 5682	30.1	V	12	70	4441
15	5512 / 5560	76.86	V	7	78	1027
16	5513 / 5561	76.80	V	7	78	1027
17	5514 / 5562	76.64	V	7	82	1163

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.

Opacity Monitoring (EP's 12, 13, 14, 14, 15, 16 and 17):

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes ⁽¹⁾ No

⁽¹⁾ EP 12 is the only emission points that require a Facility O&M Plan.

Compliance Assurance Monitoring (CAM) Plan Required? Yes ⁽²⁾ No

⁽²⁾ EP 13, is the only emission point that requires a CAM Plan.

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

**Compliance Assurance Monitoring Plan
Baghouse for PM Control
Emission Point 013**

I. Background

A. Emissions Unit

Description: Truck Gluten/Germ Loadout, Rail Gluten Loadout

Identification: EU-13A and EU-13B
 Facility: Cargill, Inc.

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No: LCPH PTO 6038
 Emission limits: PM/PM₁₀: 3.25 lb/hr
 PM: 0.1 gr/dscf

C. Control Technology Baghouse

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment indicators: differential pressure across the baghouse and no visible emissions observations. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance, if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range during normal operations, not including startup and shutdown events. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion must be reported in the Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

1. Indicator	Pressure differential across the baghouse	Visible emissions observations
Measurement Approach	Daily inspection of pressure differential across the baghouse	Daily inspection of visible emissions from the baghouse
2. Indicator Range	An excursion is defined as a pressure differential less than 0.1" w.c. or greater than 8.0" w.c. Excursions trigger an inspection, corrective action and a recordkeeping requirement.	An excursion is defined as visible emissions. Excursions trigger an inspection, corrective action and a recordkeeping requirement.
3. Performance Criteria		
A. Data Representativeness	An observation of pressure differential below 0.1" w.c. or greater than 8" w.c. could reveal a decrease in the performance of the control equipment and potentially result in an increase of PM emissions if corrective actions are not initiated.	An observation of visible emissions could reveal a decrease in the performance of the control equipment and potentially result in an increase of PM emissions if corrective actions are not initiated.

B. Recordkeeping and Reporting (Verification of Operational Status)	Daily differential pressure readings Record any excursions and corrective actions, inspections and maintenance resulting from readings outside the indicator range.	Daily visible emissions observations. Record any excursions and corrective actions, inspections and maintenance resulting from the inspection.
C. QA/QC Practices and Criteria	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.	Observe no emissions are being emitted. If an emission is seen, the system is immediately shut down for review.
D. Monitoring Frequency	The pressure differential will be monitored on a daily basis when the baghouse is operating.	Visual observation is conducted daily.
E. Data Collection Procedures	Differential pressure readings are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.	Visual observations are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.
F. Averaging Period	None	None

III. Justification

A. Background

The pollutant specific emission unit is the truck gluten/germ loadout and rail gluten loadout. Daily baghouse operating requirements include monitoring and evaluations of various parameters, recordkeeping, preventative maintenance, and the appropriate response to any malfunctions.

B. Rationale for Selection of Performance Indicator

Pressure differential monitoring was selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the PM emission standard. A pressure differential less than 0.1" w.c. or greater than 8.0" w.c. is indicative of a potential increase in emissions due to a decrease in the performance of the baghouse. Therefore, the detection of minimal or excessive pressure is used as a performance indicator.

Visible emissions observations were selected as the secondary performance indicator. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Therefore, visible emissions are used as a performance indicator.

C. Rationale for Selection of Indicator Level

The range selected for the pressure differential across the baghouse is a reflection of historical normal operating conditions for the baghouse. A stack test was successfully completed on January 23, 2009. The pressure differential across the baghouse was recorded for this test. Emissions of PM

were in compliance with permit conditions. An indicator range of no visible emissions was selected because an increase in visible emissions is indicative of an increase in PM emissions.

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 20

Associated Equipment.

EP	EU	EU Description	Raw Material/Fuel	Rated Capacity	CE ID	CE Description
20	20A	Germ Dryer Burner	Natural Gas	0.04 mmcf/hr	CE-20	Scrubber
	20B	Feed Drying System	Gluten	9.38 tph (dry basis)		
	20C	Germ Dryer Sections 1-4	Germ	12.5 tph (dry basis)		
	20D	Waste Gas Steepwater Evaporator	Steepwater	4,583.33 bu/hr		
	20E	Germ Rotary Cooler	Germ	12.5 tph (dry basis)		
	20F	Bran Dewattering Presses	Bran	18 tph (dry fiber)		

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
20	PM/PM ₁₀	2.34 lb/hr	LCPH ATI 5125 / PTO 5133
	SO ₂	9.0 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
20	Opacity	20%	LCPH ATI 5125 / PTO 5133 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5125 / PTO 5133 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO ₂	500 ppmv	LCPH ATI 5125 / PTO 5133 567 IAC 23.3(3)"e" LCO 10.12(2)

Operational Limits & Requirements

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

Control Device:

A wet scrubber with caustic addition 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 5125 / PTO 5133

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The maximum drying rate of each product shall not exceed the following on a 12-month rolling average:

Feed Type	Drying Capacity
Gluten	18,750 lbs/hr (dry basis)
Germ	25,000 lbs/hr (dry basis)

- C. The facility shall be limited to an average grind rate of 110,000 bushels/day based on a 12-month rolling period.
 - D. The scrubber water recycle rate must be maintained at a minimum of 342 gpm based upon the PM compliance test that was completed September 28, 1999.
 - E. A pH monitor shall be installed on the scrubber and operational at all times the process equipment is running. The scrubber medium shall be maintained at a minimum pH of 7.0 or greater.
- Authority for Requirement: LCPH ATI 5125 / PTO 5133

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 monthly drying rate log calculated on a 12-month rolling average for the Gluten Dryer.
- B. The owner or operator shall record the differential pressure across the scrubber on a weekly basis.
- C. The owner or operator shall record the scrubber recycle and fresh water makeup rates on a weekly basis.
- D. The owner or operator shall monitor and record the grind rate and hours of operation on a daily basis. This data will be used to calculate the monthly average production rate, which must be further reduced to a 12-month rolling average to demonstrate compliance with Condition 15 C.
- E. The owner or operator shall record the pH of the scrubber medium on a weekly basis. *
- F. The owner or operator shall maintain records of all maintenance and repair completed on the control device.
- G. 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.

* NOTE: The operation of an audible low pH alarm system for the scrubber unit can be operated in lieu of daily logging the pH of the recycle water to the scrubber.

Authority for Requirement: LCPH ATI 5125 / PTO 5133

Consent Decree:

This emission unit is subject to VOC and CO requirements as required by the Consent Decree. Please see the "Plant-Wide Conditions" section and Appendix A of this permit for specific Consent Decree language regarding this emission unit.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN
567 IAC 22.108(1)

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)
20	5125 / 5133	41.02	V	32	175	32500

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 4 (Food Starch):

Emission Point ID Number: 26, 27, 28

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
26	26	#2 Starch Bulk Storage Bin	Cornstarch	12.5 tph	CE-26	Bag Filter
27	27	#3 Starch Bulk Storage Bin	Cornstarch	12.5 tph	CE-27	Bag Filter
28	28	#4 Starch Bulk Storage Bin	Cornstarch	7.5 tph	CE-28	Bag Filter

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
26	VOC	0.14 lb/hr; 0.63 tpy	LCPH ATI 2243 / PTO 2159
	THAP	0.04 lb/hr	
27	PM	0.05 gr/dscf; 0.43 lb/hr	LCPH ATI 4558 / PTO 4618
	PM ₁₀	0.43 lb/hr	
	VOC	0.14 lb/hr; 0.60 tpy	
	THAP	0.03 lb/hr	
28	VOC	0.35 lb/hr; 1.51 tpy	LCPH ATI 2245 / PTO 2161
	THAP	0.09 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
26, 27, 28	Opacity	20%	LCPH ATI 2243 / PTO 2159 LCPH ATI 4558 / PTO 4618 LCPH ATI 2245 / PTO 2161 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2243 / PTO 2159 LCPH ATI 4558 / PTO 4618 LCPH ATI 2245 / PTO 2161 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 requirement listed below.

Control Device:

A fabric filter dust collector 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 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 2243 / PTO 2159
LCPH ATI 4558 / PTO 4618
LCPH ATI 2245 / PTO 2161

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.
 Authority for Requirement: LCPH ATI 2243 / PTO 2159
 LCPH ATI 4558 / PTO 4618
 LCPH ATI 2245 / PTO 2161

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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 2243 / PTO 2159
 LCPH ATI 4558 / PTO 4618
 LCPH ATI 2245 / PTO 2161

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)
26	2243 / 2159	64.1	V	6.96 x 6	78	1076
27	4558 / 4618	71	V	8	72	1000
28	2245 / 2161	64.1	V	6.96 x 6	78	1076

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.

Opacity Monitoring (EP's 26, 27 and 28):

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required?

Yes No

Facility Maintained Operation & Maintenance Plan Required?

Yes No

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 2 (Refinery):

Emission Point ID Number: 32

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
32	32	Carbon Furnace	Carbon	0.75 tph	CE-32A	Afterburner
	32B	Carbon Furnace Burner	Natural Gas	0.03 MMCF/hr	CE-32B	Wet 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
32	PM	0.06 gr/dscf; 1.44 lb/hr; 6.31 tpy	LCPH ATI 4325 / PTO 4311
	PM ₁₀	1.44 lb/hr; 6.31 tpy	
	SO ₂	36 ppmv; 1.0 lb/hr; 4.38 tpy	
	NO _x	3.28 lb/hr	
	VOC	1.00 lb/hr; 95% DE or ≤ 10 ppm	
	CO	90% DE or ≤ 100 ppm	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
32	Opacity	20%	LCPH ATI 4325 / PTO 4311 LCO 10.7
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"
	SO ₂	500 ppmv	567 IAC 23.3(3)"e" LCO 10.12(2)

Operational Limits & Requirements

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

Control Device:

An afterburner shall be installed to control VOC and CO emissions. A wet scrubber with caustic addition shall be used 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 "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 4325 / PTO 4311

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The scrubber water recycle flow rate must be maintained at a minimum of 248 gpm.
- C. The scrubber water pH must be maintained at a minimum of 7.0.
- D. The zero hearth furnace temperature shall be operated at a minimum temperature ≥ 1484 °F.
- E. Fuel use in the emission unit shall be limited to natural gas only.

Authority for Requirement: LCPH ATI 4325 / PTO 4311

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 scrubber water recycle flow and freshwater makeup rates 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. Monitor and record scrubber water pH on a weekly basis.
 - D. Monitor and record the pressure differential across the scrubber on a weekly basis.
 - E. Record all maintenance and repair completed on the control device.
 - F. Monitor the zero hearth furnace temperature continuously.
 - G. To determine compliance with the 3 hour average pursuant to Appendices H and K of the Consent Decree 05-CV-02037 the 3 hour average is broken into 8 averaging periods: 12 am to 3 am, 3 am to 6 am, 6 am to 9 am, 9 am to 12 pm, 12 pm to 3 pm, 3 pm to 6 pm, 6 pm to 9 pm, and 9 pm to 12 am.
 - H. Maintain records which indicate natural gas is the only fuel used for combustion.
- Authority for Requirement: LCPH ATI 4325 / PTO 4311

Consent Decree:

This emission unit is subject to VOC and CO requirements as required by the Consent Decree. Please see the "Plant-Wide Conditions" section and Appendix A of this permit for specific Consent Decree language regarding this emission unit.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN
567 IAC 22.108(1)

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 (scfm)
32	4325 / 4311	99.9	V	17	224	2800

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been

unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Compliance Assurance Monitoring Plan Wet Scrubber for VOC and CO Control Emission Point 032

I. Background

A. Emissions Unit

Description: Carbon Furnace and Carbon Furnace Burner
Identification: EU-32 and EU-32B
Facility: Cargill, Inc.

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No: LCPH PTO 4311
Emission limits: VOC: 3.25 1.0 lb/hr; 95% DE or ≤ 10 ppm
CO: 90% DE or ≤ 100 ppm

C. Control Technology Wet Scrubber

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment indicators: scrubber recirculation flow rate and scrubber water pH. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance, if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range during normal operations, not including startup and shutdown events. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion must be reported in the Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

1. Indicator	Scrubber water recirculation rate	Scrubber water pH
Measurement Approach	Daily inspection of scrubber water recirculation rate	Daily inspection of scrubber water pH
2. Indicator Range	An excursion is defined as a scrubber recirculation rate less than 248 gpm. Excursions trigger an inspection, corrective action and a recordkeeping requirement.	An excursion is defined as a pH reading less than 7.0. Excursions trigger an inspection, corrective action and a recordkeeping requirement.
3. Performance Criteria		
A. Data Representativeness	An observation of the recirculation rate below 248 gpm could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC and CO emissions if corrective actions are not initiated.	An observation of the pH below 7.0 at the scrubber could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC and CO emissions if corrective actions are not initiated.
B. Recordkeeping and Reporting (Verification of Operational Status)	Daily flow readings Record any excursions and corrective actions, inspections and maintenance resulting from readings outside the indicator range.	Daily pH readings. Record any excursions and corrective actions, inspections and maintenance resulting from the inspection.
C. QA/QC Practices and Criteria	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.
D. Monitoring Frequency	The recirculation flow rate will be monitored on a daily basis when the scrubber is operating.	The scrubber pH will be monitored on a daily basis when the scrubber is operating.
E. Data Collection Procedures	Recirculation flow rate readings are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.	Scrubber pH readings are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.
F. Averaging Period	None	None

III. Justification

A. Background

The pollutant specific emission unit is the carbon furnace and burner. Daily scrubber operating requirements include monitoring and evaluation of various parameters, recordkeeping, preventative maintenance, and the appropriate response to any malfunctions.

B. Rationale for Selection of Performance Indicator

Recirculation flow rate monitoring was selected as the performance indicator because it is indicative of operation of the scrubber in a manner necessary to comply with the VOC and CO emission standards. A recirculation flow rate less than 248 gpm is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of minimal recirculation flow is used as a performance indicator.

Scrubber water pH was selected as the secondary performance indicator. A pH drop less than 7.0 is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of excessive pH drop is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The ranges selected are a reflection of historical normal operating conditions for the scrubber. The selected ranges will be monitored to ensure compliance with the current permit conditions for recirculation flow rate and scrubber water pH. The changes in recirculation rate and pH were selected as the indicator range because a recirculation rate less than 248 gpm and a pH less than 7.0 are indicative of a potential increase in VOC and CO emissions due to a decrease in the performance of this scrubber. If the scrubber is operating properly, the recirculation rate and pH will be within the identified range, except during periods of startup, shutdown, or upset conditions.

Authority for Requirement: 567 IAC 22.108(3)

Process Group 2 (Refinery):

Emission Point ID Number: 33

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
33	33A	HCL Tank A	HCL	5 tph	CE-33	Packed Bed Scrubber
	33B	HCL Tank B				
	33C	Acid Storage Tank				
	33D	Acid Head Tank				
	33E	Acidification Tank				
	33F	Converter Feed Tank				
	33G	Carbon Column Feed Tank				

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
33	PM/PM ₁₀	0.51 lb/hr	LCPH ATI 6378 / PTO 6116
	VOC	0.41 lb/hr; 2.66 tpy	
	THAP	0.20 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
33	Opacity	20%	LCPH ATI 6378 / PTO 6116 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6378 / PTO 6116 567 IAC 23.3(2)"a"(2) 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 packed bed 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 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 6378 / PTO 6116

Operating Limits:

- A. The control device shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the control device shall be maintained between 0.1" and 10.0" w.c.
- C. The pH of the scrubber liquor shall be maintained at a minimum of 7.0.
- D. The recirculation water flow rate in the control device shall be maintained at a minimum of 62 gpm.

Authority for Requirement: LCPH ATI 6378 / PTO 6116

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 the pH of the scrubber liquor on a weekly basis.
 - C. The owner or operator shall monitor and record the recirculation water flow rate in the control device on a weekly basis.
 - D. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.
 - E. The owner or operator shall maintain records of all maintenance completed on the control device.
- Authority for Requirement: LCPH ATI 6378 / PTO 6116

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)
33	6378 / 6116	56.43	V	12	72	1482

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 37

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
37	37	Corn Cleaning/Convey Aspirator	Corn	153.13 tph	CE-37	Baghouse

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
37	Opacity	0%	IDNR PSD Permit 92-A-223cs LCPH ATI 3181 / PTO 4206
	PM	0.01 gr/dscf; 2.14 lb/hr; 9.4 tpy	
	PM ₁₀	2.14 lb/hr	LCPH ATI 3181 / PTO 4206

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
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 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 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 3181 / PTO 4206

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 3181 / PTO 4206

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 the cleaning cycle time for the baghouse.⁽¹⁾

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.⁽²⁾

D. The owner or operator shall maintain records of all maintenance completed on the control device.

E. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

⁽¹⁾ Per IDNR PSD Permit #92-A-223-cs measurements shall be made during the initial demonstration of compliance and conducted upon request during inspections only.

⁽²⁾ Per IDNR PSD Permit #92-A-223-cs, if visible emissions are observed, a formal Method 9 shall be conducted.

Authority for Requirement: LCPH ATI 3181 / PTO 4206

IDNR PSD Permit Requirements:

- Informal opacity checks are required weekly
- Formal (Method 9) opacity readings are required only when visible emissions is noted during the informal reading.
- Pressure drop (range) across the baghouse shall be made during the initial demonstration of compliance and conducted upon request during inspections.
- Cleaning cycle time for the baghouse shall be made during the initial demonstration of compliance and conducted upon request during inspections.

Authority for Requirement: PSD Permit 92-A-223cs

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 (scfm)
37	3181 / 4206	108.48	V	32.04 x 26.5	85	15115

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 40, 41

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
40	40	Mill Aspiration System	Corn	110,000 BPD	CE-40	Packed Bed Scrubber
	40B	Gluten Tank				
	40C	Clarifier Feed Tank				
	40D	Primary Feed Tank				
	40E	Clarifiers				
	40F	MST Feed Tank				
	40G	Millwater Tank				
41	41	Steep House Aspiration System	Corn	110,000 BPD	CE-41	Wet 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
40	SO ₂	10 ppmv; 0.75 lb/hr; 3.29 tpy	LCPH ATI 4230 / PTO 4309
	VOC	8.25 lb/hr; 36.14 tpy	
	THAP	0.26 lb/hr	
41	SO ₂	10 ppmv; 2.35 lb/hr; 10.29 tpy	LCPH ATI 6034 / PTO 5761
	VOC	9.79 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
40	Opacity	20%	LCPH ATI 6034 / PTO 5761 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6034 / PTO 5761 567 IAC 23.4(7) LCO 10.9(1)"g"
40,41	SO ₂	500 ppmv	567 IAC 23.3(3)"e" LCO 10.12(2)

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 and volatile organic compound emissions. The control equipment shall be maintained on this source in good operating condition at all times. All appropriate probes and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed and maintained in good operating condition. Authority for Requirement: LCPH ATI 4230 / PTO 4309
LCPH ATI 6034 / PTO 5761

Operating Limits (EP 40):

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and/or good operating practices.
- B. The recirculation water flow rate in the scrubber shall be no less than 30 gpm.
- C. The pH of the scrubbing liquor shall be maintained at a minimum of 6.9.
- D. The facility shall be limited to an average grind rate of 110,000 bushels/day based on a 12-month rolling period.

Authority for Requirement: LCPH ATI 4230 / PTO 4309

Operating Limits (EP 41):

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

- 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 190 gpm.
- C. The pH of the scrubbing liquor shall be maintained at a minimum of 6.9.
- D. The facility shall be limited to a grind rate of 110,000 bushels/day based on a 12-month rolling total.

Authority for Requirement: LCPH ATI 6034 / PTO 5761

Operating Condition Monitoring and Recordkeeping (EP40):

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 pressure differential across the scrubber on a weekly basis.
- B. The owner or operator shall monitor and record water re-circulation flow rate in the scrubber on a weekly basis.
- C. The owner or operator shall monitor and record the pH of the scrubbing liquid on a weekly basis.
- D. The owner or operator shall record all maintenance and repair completed on the control device.
- E. The owner or operator shall monitor and record the grind rate and hours of operation on a daily basis. This data will be used to calculate the monthly average production rate, which must be further reduced to a 12-month rolling average to demonstrate compliance with Operating Limits Condition D.

Authority for Requirement: LCPH ATI 4230 / PTO 4309

Operating Condition Monitoring and Recordkeeping (EP41):

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 water re-circulation flow rate in the scrubber on a weekly basis.
- B. Monitor and record the pH of the scrubbing liquid on a weekly basis.
- C. Record all maintenance and repair completed on the control device.
- D. The facility shall monitor and record the grind rate on a daily basis.

Authority for Requirement: LCPH ATI 6034 / PTO 5761

Reporting:

Submit quarterly emissions report summarizing the following item by the 30th of each month for the previous quarter (Jan. 30, Apr. 30, Jul. 30, and Oct. 30).

- A. Submit a quarterly report of the facility's average daily grind rate for each month of the quarter.

Authority for Requirement: LCPH ATI 4230 / PTO 4309

LCPH ATI 6034 / PTO 5761

Consent Decree:

EP 41 is subject to VOC requirements as required by the Consent Decree. Please see the "Plant-Wide Conditions" section and Appendix A of this permit for specific Consent Decree language regarding this emission unit.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN

567 IAC 22.108(1)

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)
40	4230 / 4309	40.9	H	30 x 30	94	7825
41	6034 / 5761	69.82	V	49	94	25358

Monitoring Requirements

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

Opacity Monitoring: (EP 41 only)

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes ⁽¹⁾ No

⁽¹⁾ CAM Plan required for EP 40 and EP 41

**Compliance Assurance Monitoring Plan
Packed Bed Scrubber for VOC Control
Emission Point 040**

I. Background

A. Emissions Unit

Description:	Mill Aspiration System, Gluten Tank, Clarifier Feed Tank, Primary Feed Tank, Clarifiers, MST Feed Tank, Millwater Tank
Identification:	EU-40
Facility:	Cargill, Inc.

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No:	LCPH PTO 4309
Emission limits:	VOC: 8.25 lb/hr; 36.14 tpy
C. Control Technology	Packed Bed Scrubber

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment indicators: scrubber recirculation flow rate and scrubber water pH. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance, if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range during normal operations, not including startup and shutdown events. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion must be reported in the Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

1. Indicator	Scrubber water recirculation rate	Scrubber water pH
Measurement Approach	Daily inspection of scrubber water recirculation rate	Daily inspection of scrubber water pH
2. Indicator Range	An excursion is defined as a scrubber recirculation rate less than 30 gpm. Excursions trigger an inspection, corrective action and a recordkeeping requirement.	An excursion is defined as a pH reading less than 6.9. Excursions trigger an inspection, corrective action and a recordkeeping requirement.
3. Performance Criteria		
A. Data Representativeness	An observation of the recirculation rate below 30 gpm could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC emissions if corrective actions are not initiated.	An observation of the pH below 6.9 at the scrubber could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC emissions if corrective actions are not initiated.
B. Recordkeeping and Reporting (Verification of Operational Status)	Daily flow rate readings Record any excursions and corrective actions, inspections and maintenance resulting from readings outside the indicator	Daily pH readings. Record any excursions and corrective actions, inspections and maintenance resulting from the inspection.

	range.	
C. QA/QC Practices and Criteria	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.
D. Monitoring Frequency	The recirculation flow rate will be monitored on a daily basis when the scrubber is operating.	The scrubber pH will be monitored on a daily basis when the scrubber is operating.
E. Data Collection Procedures	The recirculation flow rate is recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.	Scrubber pH readings are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.
F. Averaging Period	None	None

III. Justification

A. Background

The pollutant specific emission unit is the mill aspiration system, gluten tank, clarifier feed tank, primary feed tank, clarifiers, MST feed tank and millwater feed tank. Daily scrubber operating requirements include monitoring and evaluation of various parameters, recordkeeping, preventative maintenance, and the appropriate response to any malfunctions.

B. Rationale for Selection of Performance Indicator

Recirculation flow rate monitoring was selected as the performance indicator because it is indicative of operation of the scrubber in a manner necessary to comply with the VOC emission standard. A recirculation flow rate less than 30 gpm is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of minimal recirculation flow is used as a performance indicator.

Scrubber water pH was selected as the secondary performance indicator. A pH drop less than 6.9 is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of excessive pH drop is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The ranges selected are a reflection of historical normal operating conditions for the scrubber. The selected ranges will be monitored to ensure compliance with the current permit conditions for recirculation flow rate and scrubber water pH. The changes in recirculation rate and pH were selected as the indicator range because a recirculation rate less than 30 gpm and a pH less than 6.9 are indicative of a potential increase in VOC emissions due to a decrease in the performance of this scrubber. If the scrubber is operating properly, the recirculation rate and pH will be within the identified range, except during periods of startup, shutdown, or upset conditions.

Compliance Assurance Monitoring Plan Packed Bed Scrubber for VOC Control Emission Point 041

I. Background

A. Emissions Unit

Description: Steep House Aspiration System
 Identification: EU-41
 Facility: Cargill, Inc.

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No: LCPH PTO 5761
 Emission limits: VOC: 9.79 lb/hr

C. Control Technology Packed Bed Scrubber

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment indicators: scrubber recirculation flow rate and scrubber water pH. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance, if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range during normal operations, not including startup and shutdown events. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion must be reported in the Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

1. Indicator	Scrubber water recirculation rate	Scrubber water pH
Measurement Approach	Daily inspection of scrubber water recirculation rate	Daily inspection of scrubber water pH
2. Indicator Range	An excursion is defined as a scrubber recirculation rate less than 190 gpm. Excursions trigger an inspection, corrective action and a recordkeeping	An excursion is defined as a pH reading less than 6.9. Excursions trigger an inspection, corrective action and a recordkeeping requirement.

	requirement.	
3. Performance Criteria		
A. Data Representativeness	An observation of the recirculation rate below 190 gpm could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC emissions if corrective actions are not initiated.	An observation of the pH below 6.9 at the scrubber could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC emissions if corrective actions are not initiated.
B. Recordkeeping and Reporting (Verification of Operational Status)	Daily flow rate readings Record any excursions and corrective actions, inspections and maintenance resulting from readings outside the indicator range.	Daily pH readings. Record any excursions and corrective actions, inspections and maintenance resulting from the inspection.
C. QA/QC Practices and Criteria	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.
D. Monitoring Frequency	The recirculation flow rate will be monitored on a daily basis when the scrubber is operating.	The scrubber pH will be monitored on a daily basis when the scrubber is operating.
E. Data Collection Procedures	The recirculation flow rate is recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.	Scrubber pH readings are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.
F. Averaging Period	None	None

III. Justification

A. Background

The pollutant specific emission unit is the steep house. Daily scrubber operating requirements include monitoring and evaluation of various parameters, recordkeeping, preventative maintenance, and the appropriate response to any malfunctions.

B. Rationale for Selection of Performance Indicator

Recirculation flow rate monitoring was selected as the performance indicator because it is indicative of operation of the scrubber in a manner necessary to comply with the VOC emission standard. A recirculation flow rate less than 190 gpm is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of minimal recirculation flow is used as a performance indicator.

Scrubber water pH was selected as the secondary performance indicator. A pH drop less than 6.9 is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of excessive pH drop is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The ranges selected are a reflection of historical normal operating conditions for the scrubber. The selected ranges will be monitored to ensure compliance with the current permit conditions for recirculation flow rate and scrubber water pH. The changes in recirculation rate and pH were selected as the indicator range because a recirculation rate less than 190 gpm and a pH less than 6.9 are indicative of a potential increase in VOC emissions due to a decrease in the performance of this scrubber. If the scrubber is operating properly, the recirculation rate and pH will be within the identified range, except during periods of startup, shutdown, or upset conditions.

Authority for Requirement: 567 IAC 22.108(3)

Process Group 4 (Food Starch):

Emission Point ID Number: 43

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
43	43	Vacuum Cleaner Vent	Cornstarch	10 tph	CE-43	Baghouse

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
43	PM/PM ₁₀	0.05 lb/hr	LCPH ATI 5462 / PTO 5443
	VOC	0.01 lb/hr; 0.06 tpy	LCPH ATI 5462 / PTO 5443
	THAP	0.00 lb/hr	LCPH 5462 / PTO 5443

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
43	Opacity	20%	LCPH ATI 5462 / PTO 5443 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5462 / PTO 5443 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 on this source in good operating condition at all times. All appropriate probes and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed and maintained in good operating condition.

Authority for Requirement: LCPH ATI 5462 / PTO 5443

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" – 8.0" w.c.

Authority for Requirement: LCPH ATI 5462 / PTO 5443

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' 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.

C. The owner or operator shall maintain a record of all maintenance completed on the control device.
 Authority for Requirement: LCPH ATI 5462 / 5443

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 (scfm)
43	5462 / 5443	46.93	V	3.5	144	550

Monitoring Requirements

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

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 4 (Food Starch):

Emission Point ID Number: 51

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
51	51A	Packer Pulsaire	Starch	20 tph	CE-51	Baghouse
	51B	Industrial Starch Packer Web	Starch	20 tph		
	51C	Packers 5 & 6	Starch	20 tph		
	51D	A & B Bins	Starch	6.5 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
51	PM/PM ₁₀	0.43 lb/hr	LCPH ATI 5417 / PTO 5235
	VOC	0.34 lb/hr; 1.49 tpy	
	THAP	0.08 lb/hr	

General Emission Limits.

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

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 "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 5417 / PTO 5235

Operating Limits:

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

Authority for Requirement: LCPH ATI 5417 / PTO 5235

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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5417 / 5235

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)
51	5417 / 5235	49.2	V	9	82	10173

Monitoring Requirements

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

Stack Testing:

Pollutant – PM

1st Stack Test to be Completed by – October 31, 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)

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required?

Yes No

Facility Maintained Operation & Maintenance Plan Required?

Yes No

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 4 (Food Starch):

Emission Point ID Number: 52

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
52	52	#1 Starch Bulk Storage	Cornstarch	12.5 tph	CE-52	Fabric Filter

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
52	PM/PM ₁₀	0.43 lb/hr	LCPH ATI 4559 / PTO 4619
	VOC	0.14 lb/hr; 0.60 tpy	
	THAP	0.03 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
52	Opacity	20%	LCPH ATI 4559 / PTO 4619 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4559 / PTO 4619 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 requirement listed below.

Control Device:

A Mikropul / Mikro-Pulaire 21-8-100 fabric filter dust collector 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 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 4559 / PTO 4619

Operating Limits:

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

Authority for Requirement: LCPH ATI 4559 / PTO 4619

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 records of all maintenance completed on the control device.
 Authority for Requirement: LCPH ATI 4559 / PTO 4619

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 (scfm)
52	4559 / 4619	73.5	V	8	72	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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 4 (Food Starch):

Emission Point ID Number: 58

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
58	58	Starch Truck Loadout	Starch	7.008 tph	CE-58	Baghouse

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
58	PM/PM ₁₀	1.2 lb/hr	LCPH ATI 6243 / PTO 6040
	VOC	0.14 lb/hr; 0.62 tpy	
	THAP	0.04 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
58	Opacity	20%	LCPH ATI 6243 / PTO 6040 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6243 / PTO 6040 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 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 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 6243 / PTO 6040

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 6243 / PTO 6040

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 records of all maintenance completed on the control device.
 Authority for Requirement: LCPH ATI 6243 / PTO 6040

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)
58	6243 / 6040	47.42	V	9.96" x 9.96"	70	4078

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 61

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
61	61	Mod House Tanks	Cl ₂	24 tph	CE-61	Packed Bed 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
61	SO ₂	500 ppmv	LCPH ATI 204 / PTO 121 567 IAC 23.3(3)"e" LCO 10.12(2)

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 SO₂ 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 "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 204 / PTO 121

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 pressure differential across the wet scrubber shall be maintained between 0.1" to 3" w.c.
- C. The recirculation water flow rate in the wet scrubber shall be maintained at a minimum of 25 gpm.
- D. The pH of the scrubber liquid shall be maintained at a minimum of 7.0.
- E. The owner or operator shall produce no more than 105,000 tons of oxidized starch per rolling 12-month period.

Authority for Requirement: LCPH ATI 204 / PTO 121

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 records of all maintenance completed on the control device.
- B. The owner or operator shall monitor and record the differential pressure across the control device on a weekly basis.
- C. The owner or operator shall monitor and record the recirculation water flow rate in the control device on a weekly basis.
- D. The owner or operator shall monitor and record the pH of the scrubber liquid on a weekly basis.
- E. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

Authority for Requirement: LCPH ATI 6243 / PTO 6040

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)
61	204 / 121	59.69	V	18	76	722

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)

Process Group 4 (Food Starch):

Emission Point ID Number: 65

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
65	65	Starch Rail Loadout	Starch	18.173 tph	CE-65	Baghouse

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
65	PM/PM ₁₀	0.4 lb/hr	LCPH ATI 2139 / PTO 2246
	VOC	0.07 lb/hr; 0.30 tpy	
	THAP	0.02 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
65	Opacity	20%	LCPH ATI 2139 / PTO 2246 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2139 / PTO 2246 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 "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: LPCH ATI 2139 / PTO 2246

Operating Limits:

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

Authority for Requirement: LPCH ATI 2139 / PTO 2246

Operating Condition Monitoring and Recordkeeping:

- 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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 2139 / PTO 2246

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)
65	2139 / 2246	32.1	D	6.96" x 6.96"	73	2013

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 68

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
68	68	Cracked Corn Hammermill	Corn	7.66 tph	CE-68	Baghouse

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
68	PM/PM ₁₀	0.06 lb/hr	LCPH ATI 5881 / PTO 5582

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
68	Opacity	20%	LCPH ATI 5881 / PTO 5582 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5881 / PTO 5582 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 emissions. The control equipment shall be maintained on this source in a good operating condition at all times. All appropriate probes and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed and maintained in good operating condition.

Authority for Requirement: LCPH ATI 5881 / PTO 5582

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 5881 / PTO 5582

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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5881 / PTO 5582

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)
68	5881 / 5582	31.86	V	12 x 12	Ambient	1302

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 70

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
70	70A	Starch Modification Tank 1	Starch	24 tph	CE-70	Packed Bed Scrubber
	70B	Starch Modification Tank 2	Starch	24 tph		
	70C	Starch Washer 1	Starch	24 tph		
	70D	Starch Washer 2	Starch	24 tph		
	70E	Soda Ash Storage Tank 3	Soda Ash	24 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
70	SO ₂	0.35 lb/hr	LCPH ATI 4380 / PTO 4447

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
70	PM	0.1 gr/dscf	LCPH ATI 4380 / PTO 4447 567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"
	Opacity	20%	LCPH ATI 4380 / PTO 4447 LCO 10.7
	SO ₂	500 ppmv	LCPH ATI 4380 / PTO 4447 567 IAC 23.3(3)"e" LCO 10.12(2)

Operational Limits & Requirements

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

Control Device:

A packed bed scrubber shall be installed to control SO₂ 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 "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 4380 / PTO 4447

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 pressure differential across the wet scrubber shall be maintained between 0.1" to 4.5" w.c.
- C. The recirculation water flow rate in the wet scrubber shall be maintained at a minimum of 12 gpm.
- D. The pH of the scrubber liquid shall be maintained at a minimum of 7.0.
- E. The owner or operator shall produce no more than 105,000 tons of oxidized starch per rolling 12-month period.

Authority for Requirement: LCPH ATI 4380 / PTO 4447

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 records of all maintenance completed on the control device.
- B. The owner or operator shall monitor and record the differential pressure across the control device on a weekly basis.
- C. The owner or operator shall monitor and record the recirculation water flow rate in the control device on a weekly basis.
- D. The owner or operator shall monitor and record the pH of the scrubber liquid on a weekly basis.
- E. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

Authority for Requirement: LCPH ATI 4380 / PTO 4447

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)
70	4380 / 4447	64.05	V	9.96	80	1369

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 71

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
71	71A	Starch Modification Tank 9	Starch	50,000 Gallons	CE-71	Packed Bed Scrubber
	71B	Starch Modification Tank 10	Starch	50,000 Gallons		
	71C	Starch Modification Tank 12	Starch	50,000 Gallons		
	71D	Starch Modification Tank 14	Starch	125,000 Gallons		
	71E	Starch Modification Tank 15	Starch	125,000 Gallons		
	71F	Starch Modification Tank 16	Starch	125,000 Gallons		
	71G	Starch Modification Tank 17	Starch	125,000 Gallons		

Applicable Requirements

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

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

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
71	SO ₂	8.9 lb/hr	LCPH ATI 5723 / PTO 4811
	PM	0.26 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
71	Opacity	20%	LCPH ATI 5723 / PTO 4811 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5723 / PTO 4811 567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"
	SO ₂	500 ppmv	LCPH ATI 4723 / PTO 4811 567 IAC 23.3(3)"e" LCO 10.12(2)

Operational Limits & Requirements

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

Control Device:

A packed bed shall be installed to control SO₂ 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 "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 4723 / PTO 4811

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 pressure differential across the packed bed scrubber shall be maintained between 0.1" to 16" w.c.
- C. The recirculation water flow rate in the wet scrubber shall be maintained at a minimum of 15 gpm.
- D. The pH of the scrubber liquid shall be maintained at a minimum of 7.0.
- E. The owner or operator shall produce no more than 105,000 tons of oxidized starch per rolling 12-month period.

Authority for Requirement: LCPH ATI 4723 / PTO 4811

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 records of all maintenance completed on the control device.
- B. The owner or operator shall monitor and record the differential pressure across the control device on a weekly basis.
- C. The owner or operator shall monitor and record the recirculation water flow rate in the control device on a weekly basis.
- D. The owner or operator shall monitor and record the pH of the scrubber liquid on a weekly basis.
- E. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

Authority for Requirement: LCPH ATI 4723 / PTO 4811

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)
71	4723 / 4811	69.82	V	18	80	3000

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required?

Yes No

Facility Maintained Operation & Maintenance Plan Required?

Yes No

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 1 (Utilities):

Emission Point ID Number: 72

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
72	72BI	Boiler Igniters	Natural Gas	0.05 mmcf/hr	CE-72	Baghouse
	72CB	Coal Fired Boiler	Bituminous Coal	240.50 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
72	SO ₂	949 tpy	LCPH ATI 5663 / PTO 5811
	PM	0.2 lb/MMBtu; 48.1 lb/hr	
	PM ₁₀	48.1 lb/hr	
	NO _x	369 tpy	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
72	Opacity	20%	LCPH ATI 5663 / PTO 5811 LCO 10.7
	PM	0.6 lb/MMBtu	LCPH ATI 5663 / PTO 5811 567 IAC 23.3(2)(b)"2" LCO 10.8(2)"a"
	SO ₂	5 lb/MMBtu	LCPH ATI 5663 / PTO 5811 LCO 10.12(1)"a"

Operational Limits & Requirements

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

Control Device:

A fabric filter dust collector shall be used to control particulate matter emissions. Low NO_x burners and an Over Fire Air System are also being installed to reduce 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 "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 5663 / PTO 5811

NSPS and NESHAP Applicability:

This emission unit is not subject to a New Source Performance Standards (NSPS) at this time. However, per the Consent Decree, the NO_x and SO_x CEMS are to be operated in compliance with 40 CFR 60. Therefore, the applicable continuous monitoring systems sections of NSPS Subpart A – General Provisions shall apply to this source pursuant to LCCO 10.9(2) and 567 IAC 23.2(2).

Authority for Requirement: LCPH ATI 5663 / PTO 5811

This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD].

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" and 10.0" w.c.¹
- C. The coal boiler ignitors (EU-72BI) shall be fired by natural gas only.
- D. The facility shall meet all applicable continuous monitoring system requirements of 40 CFR 60 §§ 13-19 [NSPS Subpart A] and Appendices B & F to comply with LCCO 10.9(2).

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 5663 / PTO 5811

Operating Condition and 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 maintain records of all maintenance completed on the control device.
- C. Notification and record keeping requirements for NSPS Subpart A shall be done in accordance with 40 CFR §60.7.
- D. General notification and reporting requirements for NSPS Subpart A shall be done in accordance with 40 CFR §60.19.
- E. Coal analysis must be conducted using at least one composite sample a month.

Authority for Requirement: LCPH ATI 5663 / PTO 5811

Continuous Emission Monitoring:

In accordance with the Consent Decree (United States vs. Cargill, Inc. Civil Action No. 05-cv-2037), the facility shall install, calibrate, maintain, and operate a CEMS on EP 72, 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.¹

In accordance with the Consent Decree (United States vs. Cargill, Inc. Civil Action No. 05-cv-2037), the owner or operator shall install, calibrate, maintain, and operate a CEMS on EP72, and record the output of the system, for measuring sulfur dioxide (SO₂) 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.²

The owner or operator shall install, calibrate, maintain, and operate a COMS on EP 72, and record the output of the system, for measuring opacity.

¹ In accordance with paragraph 30c of the Consent Decree (United States vs. Cargill, Inc. Civil Action No. 05-cv-2037) Cargill, Inc. must comply with this requirement within the schedule set forth in Appendix D (Boiler NO_x Emission Control Plan) to comply with this requirement.

² In accordance with Paragraph 30a of the Consent Decree (United States vs. Cargill, Inc. Civil Action No. 05-cv--2037) Cargill, Inc. must comply with this requirement within the schedule set forth in Appendix B (Boiler SO₂ Emission Control Plan) to comply with this requirement.

Authority for Requirement: LCPH ATI 5663 / PTO 5811

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).

- A. Quarterly opacity monitoring report
- B. Quarterly NO_x monitoring report
- C. Quarterly SO₂ monitoring report

Consent Decree

This emission unit is subject to SO₂ and NO_x requirements as required by the Consent Decree. Please see the "Plant-Wide Conditions" section and Appendix A of this permit for specific Consent Decree language regarding these emission units.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN
567 IAC 22.108(1)

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)
72	5663 / 5811	226.8	V	129	322	85530.45

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.

Pollutant:	Filterable PM or TSM
Initial Stack Test to be Completed by:	Date specified pursuant to §63.7510
Subsequent Stack Tests to be Completed by:	Dates specified pursuant to §63.7515
Test Method (Filterable PM):	40 CFR 60, Appendix A-3 or A-6, Method 5 or 17
Test Method (Filterable TSM):	40 CFR 60, Appendix A-8, Method 29
Authority for Requirement:	567 IAC 22.108(3) 40 CFR 63 Subpart DDDDD

Pollutant:	HCl
Initial Stack Test to be Completed by:	Date specified pursuant to §63.7510
Subsequent Stack Tests to be Completed by:	Dates specified pursuant to §63.7515
Test Method:	40 CFR 60, Appendix A-8, Method 26 or 26A
Authority for Requirement:	567 IAC 22.108(3) 40 CFR 63 Subpart DDDDD

Pollutant:	Hg
Initial Stack Test to be Completed by:	Date specified pursuant to §63.7510
Subsequent Stack Tests to be Completed by:	Dates specified pursuant to §63.7515
Test Method:	40 CFR 60, Appendix A-8, Method 29, 30A, or 30B or 40 CFR 61, Appendix B, Method 101A, or ASTM Method D6784
Authority for Requirement:	567 IAC 22.108(3) 40 CFR 63 Subpart DDDDD

Pollutant:	CO
Initial Stack Test to be Completed by:	Date specified pursuant to §63.7510

Pollutant:	CO
Subsequent Stack Tests to be Completed by:	Dates specified pursuant to §63.7515
Test Method:	40 CFR 60, Appendix A-4, Method 10
Authority for Requirement:	567 IAC 22.108(3) 40 CFR 63 Subpart DDDDD

Continuous Emissions Monitoring:

Pollutant:	Opacity
Continuous Emissions Monitor ID:	ME-72D
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	February 12 and 17, 2004
Ongoing System Calibration/Quality Assurance	40 CFR 60
Reporting & Recordkeeping:	40 CFR 60
Authority for Requirement:	LCPH ATI 5663 / PTO 5811 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"55"

Pollutant:	NO _x
Continuous Emissions Monitor ID:	ME-72C
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	April 5-8, 2010
Ongoing System Calibration/Quality Assurance	40 CFR 60
Reporting & Recordkeeping:	40 CFR 60
Authority for Requirement:	LCPH ATI 5663 / PTO 5811 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"55"

Pollutant:	SO ₂
Continuous Emissions Monitor ID:	ME-72A
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	April 5-8, 2010
Ongoing System Calibration/Quality Assurance	40 CFR 60
Reporting & Recordkeeping:	40 CFR 60
Authority for Requirement:	LCPH ATI 5663 / PTO 5811 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"55"

Other Parameters:

Pollutant:	Diluent O ₂
Continuous Emissions Monitor ID:	ME-72B
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	April 5-8, 2010
Ongoing System Calibration/Quality Assurance	40 CFR 60
Reporting & Recordkeeping:	40 CFR 60
Authority for Requirement:	LCPH ATI 5663 / PTO 5811 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"55"

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 Plan
Baghouse for PM and PM₁₀ Control
Emission Point 072**

I. Background

A. Emissions Unit

Description: Coal Boiler Igniters
Babcock & Wilcox Pulverized Coal Boiler
Identification: EU-72BI, EU-72CB
Facility: Cargill, Inc.

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No: LCPH PTO 5811
Emission limits: PM/PM₁₀: 48.1 lb/hr;
PM: 0.1 gr/dscf, 0.2 lb/MMBtu

C. Control Technology Baghouse

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment indicators: differential pressure across the baghouse. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance, if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range during normal operations, not including startup and shutdown events. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion must be reported in the Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

1. Indicator	Pressure differential across the baghouse	Continuous Opacity Monitoring System
Measurement Approach	Inspection of differential pressure across the bags in the	Six-Minute Opacity Average

	baghouse a minimum of four times per hour	
2. Indicator Range	An excursion is defined as a differential pressure reading across the baghouse outside 0.1" – 10" W.C. Excursions trigger an inspection, corrective action and a recordkeeping requirement.	An excursion is defined as six-minute opacity average that exceeds 10%, except for one six-minute period per hour of not more than 20%. Excursions trigger an inspection, corrective action and a recordkeeping requirement.
3. Performance Criteria		
A. Data Representativeness	An observation of differential pressure below 0.1" w.c. or above 10" W.C. across the baghouse could reveal a decrease in the performance of the control equipment and potentially result in an increase of PM emissions if corrective actions are not initiated.	Install the COMS at a representative location in the baghouse exhaust per 40 CFR 60, Appendix B, Performance Specification 1 (PS-1). An observation of a six-minute opacity greater than 10% could reveal a decrease in the performance of the control equipment and potentially result in an increase of PM emissions if corrective actions are not initiated.
B. Recordkeeping and Reporting (Verification of Operational Status)	Pressure drop readings collected four times per hour Record any excursions and corrective actions, inspections and maintenance resulting from readings outside the indicator range.	Whenever the opacity is greater than 10%, document the duration and cause if known, corrective actions taken and any inspections and maintenance conducted. Results of initial COMS performance evaluation conducted per PS-1 (February 1, 1991)
C. QA/QC Practices and Criteria	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.	Install and evaluate the COMS per PS-1. The continuous opacity monitor will be automatically calibrated for zero and span adjustments daily.
D. Monitoring Frequency	The differential pressure will be monitored a minimum of four times per hour when the baghouse is operating.	Record all excursions events. Monitor the opacity of the baghouse continuously (every 10 seconds).
E. Data Collection Procedures	Differential pressure readings are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance	Set up the data acquisition system (DAS) to retain all 6-minute and hourly average opacity data. Opacity reports will be kept for 5

	records will be kept for 5 years.	years.
F. Averaging Period	None	Use the 10-second opacity data to calculate 6-minute averages. Use the 6-minute averages to calculate the hourly block average opacity.

III. Justification

A. Background

The pollutant specific emission unit is the coal boiler. Daily baghouse operating requirements include monitoring and evaluation of various parameters, recordkeeping, preventative maintenance, and the appropriate response to any malfunctions.

B. Rationale for Selection of Performance Indicator

Continuous differential pressure monitoring was selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the PM emission standard. A pressure drop greater than 10" W.C. or less than 0.1" W.C. is indicative of a potential increase in PM emissions due to a decrease in the performance of the baghouse. Therefore, the detection of excessive pressure is used as a performance indicator.

The opacity reading from the continuous opacity monitor (COM) system was selected as a secondary indicator.

C. Rationale for Selection of Indicator Level

Differential pressure between 0.1" and 10" are indicative of normal operations of the baghouse. If a differential pressure outside this range is noted, corrective action will be taken within 8 hours. The changes in pressure drop were selected as the indicator range because a pressure drop greater than 10" or less than 0.1" is indicative of a potential increase in PM emissions due to a decrease in the performance of this baghouse. If the baghouse is operating properly, the pressure drop will be within the identified range, except during periods of startup, shutdown, or upset conditions.

The opacity action level of 10% is used to ensure early detection of problems and compliance with the 6-minute average limit for the unit of 20%; 1-hour average of 5%. If the opacity of 10% is exceeded, the system will be inspected and corrective action will be taken.

Authority for Requirement: 567 IAC 22.108(3)

Process Group 1 (Utilities):

Emission Point ID Number: 75

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
75	75	Ash Truck Loading	Ash	0.85 tph	CE-75	Baghouse

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
75	Opacity	20%	LCPH ATI 6130 / PTO LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6130 / PTO 567 IAC 23.3(2)"a"(2) 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 baghouse dust collector 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 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 6130 / PTO

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 6130 / PTO

Operating Condition and 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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 6130 / PTO

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)
75	6130 /	65.68	VR	6	155	2102

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 1 (Utilities):

Emission Point ID Number: 76, 77

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
76	76	Ash Storage Silo	Ash	0.82 tph	CE-76	Bag Filter
77					CE-77	Bag Filter

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
76, 77	Opacity	20%	LCPH ATI 6130 / PTO LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6130 / PTO 567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"

Monitoring Requirements

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

Opacity Monitoring (EP's 76 and 77):

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 79

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
79	79	Industrial Starch Loadout	Starch	20 tph	CE-79	Baghouse

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
79	Opacity	0%	DNR PSD#92-A-223es
	PM	0.01 gr/dscf; 0.39 lb/hr; 1.71 tpy	LCPH ATI 5463 / PTO 5345
	PM ₁₀	0.39 lb/hr	LCPH ATI 5463 / PTO 5345

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
79	Opacity	20%	LCPH ATI 5463 / PTO 5345 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5463 / PTO 5345 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 "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 5463 / PTO 5345

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.g.
- C. The owner or operator shall produce no more than 105,000 tons of oxidized starch per rolling 12-month period.

Authority for Requirement: LCPH ATI 5463 / PTO 5345

Operating Condition and 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 the cleaning cycle time for the baghouse.⁽¹⁾
- 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.⁽²⁾

- D. The owner or operator shall maintain records of all maintenance completed on the control device.
- E. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

⁽¹⁾ Per IDNR PSD Permit #92-A-223-es, measurements shall be made during the initial demonstration of compliance and conducted upon request during inspections only.

⁽²⁾ Per IDNR PSD Permit #92-A-223-es, if visible emissions are observed, a formal Method 9 shall be conducted.

Authority for Requirement: LCPH ATI 5463 / PTO 5345

IDNR PSD Permit Requirements:

The owner/operator shall monitor and record the following parameters. All monitoring systems shall be accurate to within five percent and shall be approved by the DNR.

- Weekly opacity observations
- Method 9 – 6 minutes when any visible emissions are present during weekly observations
- Pressure drop (range) across the baghouse shall be available upon request during inspections
- Cleaning cycle time for the baghouse shall be available upon request during inspections

Authority for Requirement: PSD Permit #92-A-223es

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)
79	5463 / 5345	41.18	V	12 x 9.96	73	4607

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 – PM

1st Stack Test to be Completed by – October 31, 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)

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 4 (Food Starch):

Emission Point ID Number: 84, 85

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
84	84	#9 Starch Bulk Storage Bin	Starch	5 tph	CE-84	Bag Filter
85	85	#10 Starch Bulk Storage Bin	Starch	5 tph	CE-85	Bin Vent Filter

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
84	VOC	0.24 lb/hr; 1.06 tpy	LCPH ATI 1709 / PTO 1426
	THAP	0.06 lb/hr	
85	PM/PM ₁₀	0.15 lb/hr	LCPH ATI 5464 / PTO 5444
	VOC	0.24 lb/hr; 1.07 tpy	
	THAP	0.06 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
84, 85	Opacity	20%	LCPH ATI 1709 / PTO 1426 LCPH ATI 5464 / PTO 5444 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 1709 / PTO 1426 LCPH ATI 5464 / PTO 5444 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 fabric filter dust collector (bin vent filter (EP 85)) 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 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 1709 / PTO 1426
LCPH ATI 5464 / PTO 5444

Operating Limits:

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

Authority for Requirement: LCPH ATI 1709 / PTO 1426
LCPH ATI 5464 / PTO 5444

Operating Condition and 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 1709 / PTO 1426
LCPH ATI 5464 / PTO 5444

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)
84	1709 / 1426	78.3	H	5.52 x 8.04	72	1791
85	5464 / 5444	79.46	H	5.52 x 8.04	72	1791

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.

Opacity Monitoring (EP's 84 and 85):

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 90

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
90	90	Starch Flash Dryer #4	Starch	14 tph	CE-90	Spray Chamber 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
90	Opacity	0%	LCPH ATI 2452 / PTO 2497
	PM	0.015 gr/dscf; 9.51 lb/hr; 41.7 tpy	DNR PSD#92-A-223as
	PM ₁₀	9.51 lb/hr	LCPH ATI 2452 / PTO 2497

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
90	Opacity	20%	LCPH ATI 2452 / PTO 2497 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2452 / PTO 2497 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO ₂	500 ppmv	LCPH ATI 2452 / PTO 2497 567 IAC 23.3(3)"e" LCO 10.12(2)

Operational Limits & Requirements

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

Control Device:

A spray chamber scrubber shall be installed to control particulate matter emissions. The control equipment may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 2452 / PTO 2497

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 pressure differential across the wet scrubber shall be maintained between 0.1" to 12" w.c.
- C. The recirculation water flow rate in the wet scrubber shall be maintained at a minimum of 120 gpm.
- D. The owner or operator shall produce no more than 105,000 tons of oxidized starch per rolling 12-month period.

Authority for Requirement: LCPH ATI 2452 / PTO 2497

Operating Condition and Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.⁽¹⁾
- B. The owner or operator shall maintain records of all maintenance completed on the control device.
- C. The owner or operator shall monitor and record the differential pressure across the control device on a daily basis.
- D. The owner or operator shall monitor and record the recirculation water flow rate in the control device on a daily basis.
- E. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

⁽¹⁾ Per IDNR PSD Permit #92-A-223-as, if visible emissions are observed, a formal Method 9 shall be conducted.

Authority for Requirement: LCPH ATI 2452 / PTO 2497

IDNR PSD Permit Requirements:

The following parameters shall be monitored and recorded. All monitoring systems shall be accurate to within five percent and shall be approved by the DNR.

- Weekly opacity observations
- Method 9 – 6 minutes when any visible emissions are present during weekly observations
- Daily pressure drop across the scrubber
- Daily water flow to the scrubber

The owner/operator shall retain all records required herein for a period of five years following the date of such records.

Authority for Requirement: PSD Permit #92-A-223as

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)
90	2452 / 2497	82.91	V	58.08	106	72367

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions

prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Compliance Assurance Monitoring Plan Wet Scrubber for VOC, PM, PM10 Control Emission Point 090

I. Background

A. Emissions Unit

Description: #4 Starch Ring Flash Dryer
Identification: EU-90
Facility: Cargill, Inc.

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No: LCPH PTO 2497
Emission limits: VOC: 1.46 lb/ton (oxidized starch); 105,000 ton/year (oxidized starch)
PM: 9.5 lb/hr; 0.1 gr/dscf

C. Control Technology Spray Chamber Scrubber

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment indicators: scrubber recirculation flow rate and scrubber pressure differential. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance, if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range during normal operations, not including startup and shutdown events. An excursion

does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion must be reported in the Annual Compliance Certification Report.

- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

1. Indicator	Scrubber water recirculation rate	Scrubber Pressure Differential
Measurement Approach	Daily inspection of scrubber water recirculation rate	Daily inspection of scrubber pressure differential
2. Indicator Range	An excursion is defined as a scrubber recirculation rate less than 120 gpm. Excursions trigger an inspection, corrective action and a recordkeeping requirement.	An excursion is defined as a pressure differential reading less than 0.1" w.c. Excursions trigger an inspection, corrective action and a recordkeeping requirement.
3. Performance Criteria		
A. Data Representativeness	An observation of the recirculation rate below 120 gpm could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC, PM and PM ₁₀ emissions if corrective actions are not initiated.	An observation of pressure differential below 0.1" w.c. at the scrubber could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC, PM and PM ₁₀ emissions if corrective actions are not initiated.
B. Recordkeeping and Reporting (Verification of Operational Status)	Daily flow rate readings Record any excursions and corrective actions, inspections and maintenance resulting from readings outside the indicator range.	Daily pressure differential readings. Record any excursions and corrective actions, inspections and maintenance resulting from the inspection.
4. QA/QC Practices and Criteria	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.
5. Monitoring Frequency	The recirculation flow rate will be monitored on a daily basis when the scrubber is operating.	The scrubber pressure differential will be monitored on a daily basis when the scrubber is operating.
6. Data Collection Procedures	The recirculation flow rate is recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.	Scrubber pressure differential readings are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.
7. Averaging Period	None	None

III. Justification

A. Background

The pollutant specific emission unit is the starch flash dryer. Daily scrubber operating requirements include monitoring and evaluation of various parameters, recordkeeping, preventative maintenance, and the appropriate response to any malfunctions.

B. Rationale for Selection of Performance Indicator

Recirculation flow rate monitoring was selected as the performance indicator because it is indicative of operation of the scrubber in a manner necessary to comply with the VOC, PM and PM₁₀ emission standards. A recirculation flow rate is less than 120 gpm is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber.

Therefore, the detection of minimal recirculation flow rate is used as a performance indicator.

Scrubber pressure differential was selected as the secondary performance indicator. A pressure differential less than 0.1" w.c. is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of excessive pressure differential drop is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The ranges selected are a reflection of historical normal operating conditions for the scrubber. The changes in recirculation rate and pressure differential were selected as the indicator range because a recirculation rate less than 120 gpm and a pressure differential less than 0.1" w.c. are indicative of a potential increase in VOC, PM and PM₁₀ emissions due to a decrease in the performance of this scrubber. If the scrubber is operating properly, the recirculation rate and pressure differential will be within the identified range, except during periods of startup, shutdown, or upset conditions.

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 91, 92, 93, 94, 95

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
91	91	#11 Starch Storage Bin	Starch	14 tph	CE-91	Bag Filter
92	92	#12 Starch Storage Bin	Starch	14 tph	CE-92	Bag Filter
93	93	#13 Starch Storage Bin	Starch	14 tph	CE-93	Bag Filter
94	94	#18 Industrial Starch Storage Bin	Starch	7 tph	CE-94	Bin Vent Filters
95	95	Starch Surge Bin	Starch	14 tph	CE-95	Bag Filter

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 Limits	Authority for Requirement
91, 92, 93	Opacity	0%	LCPH ATI 2447 / PTO 2410 LCPH ATI 2446 / PTO 2409 LCPH ATI 2445 / PTO 2408 IDNR PSD Permit #92-A-223bs
	PM	0.01 gr/dscf, 0.13 lb/hr, 0.6 tpy	
91, 92, 93	PM ₁₀	0.13 lb/hr	LCPH ATI 2447 / PTO 2410 LCPH ATI 2446 / PTO 2409 LCPH ATI 2445 / PTO 2408
94	PM/PM ₁₀	0.08 lb/hr	LCPH ATI 5465 / PTO 5445
95	PM/PM ₁₀	0.13 lb/hr	LCPH ATI 2475 / PTO 2416

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
91, 92, 93, 94, 95	Opacity	20%	LCPH ATI 2447 / PTO 2410 LCPH ATI 2446 / PTO 2409 LCPH ATI 2445 / PTO 2408 LCPH ATI 5465 / PTO 5445 LCPH ATI 2475 / PTO 2416 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2447 / PTO 2410 LCPH ATI 2446 / PTO 2409 LCPH ATI 2445 / PTO 2408 LCPH ATI 5465 / PTO 5445 LCPH ATI 2475 / PTO 2416 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 (bin vent filters (EP94)) 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 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 2447 / PTO 2410
 LCPH ATI 2446 / PTO 2409
 LCPH ATI 2445 / PTO 2408
 LCPH ATI 5465 / PTO 5445
 LCPH ATI 2475 / PTO 2416

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.
- C. The owner or operator shall produce no more than 105,000 tons of oxidized starch per rolling 12-month period.

Authority for Requirement: LCPH ATI 2447 / PTO 2410
 LCPH ATI 2446 / PTO 2409
 LCPH ATI 2445 / PTO 2408

Operating Condition and 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 the cleaning cycle time for the baghouse.⁽¹⁾ **(EP's 91, 92, 93 only)**
- 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.⁽²⁾
- D. The owner or operator shall maintain records of all maintenance completed on the control device.
- E. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

⁽¹⁾ Per IDNR PSD Permit #92-A-223-bs measurements shall be made during the initial demonstration of compliance and conducted upon request during inspections only.

⁽²⁾ Per IDNR PSD Permit #92-A-223-bs, if visible emissions are observed, a formal Method 9 shall be conducted. **(EP's 91, 92, 93)**

Authority for Requirement: LCPH ATI 2447 / PTO 2410
 LCPH ATI 2446 / PTO 2409
 LCPH ATI 2445 / PTO 2408

IDNR PSD Permit Requirements: (EP 91, EP92, EP93)

The owner/operator shall, during the initial compliance demonstration(s) and on the as stated basis thereafter, monitor and record the following parameters. All monitoring systems shall be accurate to within five percent and shall be approved by the DNR.

- Weekly opacity observations
- Method 9 – 6 minutes when any visible emissions are present during weekly observations
- Pressure drop (range) across the baghouse shall be available upon request during inspections
- Cleaning cycle time for the baghouse shall be available upon request during inspections

The owner/operator shall retain all records required herein for a period of five years following the date of such records.

Authority for Requirement: PSD Permit #92-A-223bs

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)
91	2447 / 2410	118.14	H	11.30	80	1517

EP	LCPH ATI / PTO	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
92	2446 / 2409	117.93	H	11.29	80	1849
93	2445 / 2408	117.91	H	11.30	80	1849
94	5465 / 5445	116.83	H	4 x 5	100	900
95	2475 / 2416	48.34	H	8.04	81	450

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.

Opacity Monitoring (EP's 91, 92, 93, 94 and 95):

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 1 (Utilities):

Emission Point ID Number: 101

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
101	101	#2 Gas Boiler	Natural Gas	275 MMBtu/hr	CE-101	Low NO _x Burners

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
101	PM/PM ₁₀	2.09 lb/hr	LCPH ATI 5497 / PTO 5322
	SO ₂	0.16 lb/hr	
	NO _x	0.2 lb/MMBtu	NSPS Subpart Db LCPH ATI 5497 / PTO 5322
	NO _x	96.4 tpy	LCPH ATI 5497 / PTO 5322

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
101	Opacity	20%	LCO 10.7
	PM	0.24 lb/MMBtu	567 IAC 23.4(7) LCO 10.8(1)"c"
	SO ₂	500 ppmv	567 IAC 23.3(3)"e" LCO 10.12(2)

Operational Limits & Requirements

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

Control Device:

Low NO_x burners shall be used to control nitrogen oxide emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5497 / PTO 5322

NSPS & NESHAP Applicability:

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 LCCO 10.9(2)(55) and 567 IAC 23.1(2)"ccc".

Authority for Requirement: LCPH ATI 5497 / PTO 5322

This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD].

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Operating Limits:

A. This facility shall meet the monitoring requirements of 40 CFR §60.13 [NSPS Subpart A] to comply with LCCO 10.9(2).

- B. This facility shall meet the standards of 40 CFR §60.44b [NSPS Subpart Db] to comply with LCCO 10.9(2)(55).
- C. This facility shall meet the testing and emission monitoring procedures of 40 CFR §60.46b and 40 CFR §60.48b [NSPS Subpart Db] to comply with LCCO 10.9(2)(55).
- D. This facility shall meet requirements of 40 CFR 63 §§ 1-16 [NESHAP Subpart A] to comply with LCCO 10.9(4).
- E. This facility shall meet requirements of 40 CFR 63 §§ 7480 - 7575 [NESHAP Subpart DDDDD] to comply with LCCO 10.9(4)(ddddd).
- F. Fuel in this boiler shall be limited to only natural gas.
- G. For purposes of staying a synthetic minor project for Prevention of Significant Deterioration (PSD), the owner or operator shall have the following limits for a period ten (10) years from startup following the replacement of the economizer:
 - a) Record the startup date of the boiler following the replacement of the economizer. This date signifies the beginning of the ten (10) year monitoring and recordkeeping period.
 - b) The baseline actual emissions for the project are equal to 1.85 tpy PM, 1.85 tpy PM₁₀, 16.11 tpy NO_x, 20.44 tpy CO, 1.34 tpy VOC, and 0.15 tpy SO₂. The baseline actual emissions shall remain unchanged throughout the ten (10) year period.
 - c) The owner or operator shall determine the actual emissions for the project by summing the emissions each month from the gas boiler (EU 101).
 - d) Actual emissions minus the baseline actual emissions from the project shall not exceed the following PSD significant levels: 24.4 tons per 12-month rolling period of PM, 14.4 tons per 12-month rolling period for PM₁₀, 39.4 tons per 12-month rolling period for NO_x, 99.4 tons per 12-month rolling period for CO, 39.4 tons per 12-month rolling period for VOC, and 39.4 tons per 12-month rolling period for SO₂. If the emission increases from the project upon the date of startup following the economizer replacement, do not exceed the PSD significance levels, the PSD significance limits shall no longer apply after the 10-year period. If these limits are exceeded prior to the 10-year period date, the owner or operator shall submit a report pursuant to 567 IAC 33.3(18)"f"(7).

Authority for Requirement: LCPH ATI 5497 / PTO 5322

Operating Condition Monitoring & Record keeping 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.

- 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. An initial notification report for NESHAP Subpart DDDDD shall be submitted in accordance with 40 CFR §63.7545.
- D. Recordkeeping for NESHAP Subpart DDDDD shall be done in accordance with 40 CFR §63.7555.
- E. The facility shall comply with the recordkeeping requirements of 40 CFR §52.21(r)(6) and (7) as illustrated in 16.G.
- F. For purposes of staying a synthetic minor project for Prevention of Significant Deterioration (PSD), the owner or operator shall have the following monitoring and recordkeeping conditions for a period ten (10) years from the startup date of the boiler with the replaced economizer.
 - a. Record each month the sum of the actual PM, PM₁₀, NO_x, CO, VOC, and SO₂ emissions from the gas boiler (EU101). Calculate and record 12-month rolling totals.
 - b. Record each month the 12-month rolling value of the actual emissions minus the baseline actual emissions.
 - c. The owner or operator shall submit to the department the 12-month rolling value of the actual emissions minus the baseline actual emissions each calendar year following the first twelve (12) months of emissions data.

Authority for Requirement: LCPH ATI 5497 / PTO 5322

Continuous Emission Monitoring:

This facility shall comply with the requirements of NSPS Subpart Db by meeting the emission monitoring for nitrogen oxides of 40 CFR §60.48b.

In accordance with 40 CFR §60.48b(b)"1" the owner or operator of an affected facility that is subject to a nitrogen oxides standard under 60.44b shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxide emissions discharged to the atmosphere.

Authority for Requirement: LCPH ATI 5497 / PTO 5322

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) In accordance with 40 CFR §60.49b(h)(2)"i" the owner or operator of any affected facility that is subject to the nitrogen oxides standard of §60.44b and that combusts natural gas is required to submit excess emission reports for any excess emissions which occurred during the reporting period. In accordance with 40 CFR §60.49b(h)(4)"i" for purposes of §60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average nitrogen oxide emission rate, as determined under §60.46b(e), which exceeds the applicable emission limits in §60.44b.
- 2) In accordance with 40 CFR §60.49b(i) a quarterly report containing the information recorded under 40 CFR §60.49b(g) shall be submitted.
- 3) The owner or operator shall submit a report to the Department if the annual emissions, in tons per year, from the project identified in paragraph 40 CFR §52.21 (r)(6)(i), exceed the baseline actual emissions (as documented and maintained pursuant to paragraph 40 CFR §52.21(r)(6)(i)(c)), by a significant amount (as defined in paragraph 40 CFR §52.21 (b)(23)) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph 40 CFR §52.21 (r)(6)(i)(c). Such report shall be submitted to the Administrator within 60 days after the end of such year. The report shall contain the following:
 - a) The name, address and telephone number of the major stationary source;
 - b) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of this section; and
 - c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).

Authority for Requirement: LCPH ATI 5497 / PTO 5322

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)
101	5497 / 5322	25	V	56	360	87900

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:

Pollutant:	NO _x
Continuous Emissions Monitor ID:	ME-101B
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	March 15-16, 2000
Ongoing System Calibration/Quality Assurance	40 CFR 60

Reporting & Recordkeeping:	40 CFR 60
Authority for Requirement:	LCPH ATI 5497 / PTO 5322 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"55"

Other Parameters:

Pollutant:	Diluent O ₂
Continuous Emissions Monitor ID:	ME-101A
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	March 15-16, 2000
Ongoing System Calibration/Quality Assurance	40 CFR 60
Reporting & Recordkeeping:	40 CFR 60
Authority for Requirement:	LCPH ATI 5497 / PTO 5322 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"55"

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 102, 103, 104, 105

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
102	102	#14 Starch Storage Bin	Starch	14 tph	CE-102	Bag Filter
103	103	#15 Starch Storage Bin	Starch	7 tph	CE-103	Bin Vent Filters
104	104	#16 Starch Storage Bin	Starch	14 tph	CE-104	Bag Filter
105	105	#17 Starch Storage Bin	Starch	14 tph	CE-105	Bag Filter

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
102, 104, 105	PM/PM ₁₀	0.26 lb/hr	LCPH ATI 2563 / PTO 2559 LCPH ATI 2565 / PTO 2558 LCPH ATI 2566 / PTO 2556
103		0.08 lb/hr	LCPH ATI 5466 / PTO 5446

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
102,103, 104,105	Opacity	20%	LCPH ATI 2563 / PTO 2559 LCPH ATI 5466 / PTO 5446 LCPH ATI 2565 / PTO 2558 LCPH ATI 2566 / PTO 2556 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2563 / PTO 2559 LCPH ATI 5466 / PTO 5446 LCPH ATI 2565 / PTO 2558 LCPH ATI 2566 / PTO 2556 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 (bin vent filters – EP103) shall be installed to control particulate matter emissions. The control equipment may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 2563 / PTO 2559
LCPH ATI 5466 / PTO 5446
LCPH ATI 2565 / PTO 2558
LCPH ATI 2566 / PTO 2555

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer’s specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.
- C. The owner or operator shall produce no more than 105,000 tons of oxidized starch per rolling 12-month period.

Authority for Requirement: LCPH ATI 2563 / PTO 2559
 LCPH ATI 5466 / PTO 5446
 LCPH ATI 2565 / PTO 2558
 LCPH ATI 2566 / PTO 2555

Operating Condition and 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 records of all maintenance completed on the control device.
- D. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

Authority for Requirement: LCPH ATI 2563 / PTO 2559
 LCPH ATI 5466 / PTO 5446
 LCPH ATI 2565 / PTO 2558
 LCPH ATI 2566 / PTO 2555

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)
102	2563 / 2559	118.01	H	11.52	80	900
103	5466 / 5446	122.17	H	4 x 5	100	900
104	2565 / 2558	124.82	H	11.52	70	900
105	2566 / 2556	124.54	H	11.52	70	900

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.

Opacity Monitoring (EP’s 102, 103, 104 and 105):

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 109

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
109	109	Gluten Filter Vent (6)	Gluten	7.2 tph (dry basis)	--	--

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
109	VOC	5.12 lb/hr; 22.40 tpy	LCPH ATI 4232 / PTO 4312
	THAP	0.15 lb/hr	
	SO ₂	35 ppm, 4.2 lb/hr; 18.4 tpy	567 IAC 23.3(3)"e" LCO 10.12(2)
		500 ppmv	

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)
109	4232 / 4312	49.62	V	41.04 x 27	88	14157

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)

Process Group 1 (Utilities):

Emission Point ID Number: 111

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
111	111A	Coal Truck Dump	Coal	50 tph	CE-111	Dust Collector
	111B	Screw Conveyors				
	111C	Coal Granulator				
	73	South Coal Silo				
	74	North Coal Silo				

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
111	PM	0.01 gr/dscf	LCPH ATI 5669 / PTO 5676 NSPS Subpart Y
	PM/PM ₁₀	1.6 lb/hr	LCPH ATI 5669 / PTO 5676
	Opacity	10%	LCPH ATI 5669 / PTO 5676 NSPS Subpart Y

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
111	Opacity	20%	LCO 10.7
	Particulate Matter	0.1 gr/dscf	567 IAC 23.2"a"(2) 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 fabric filter dust collector 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 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 5669 / PTO 5676

NSPS Applicability:

- A. The New Source Performance Standards (NSPS) [A, General Provisions and Y, Standards of Performance for Coal Preparation Plants] shall apply to this source pursuant to LCCO 10.9(2)(22) and 567 IAC 23.1(2)(v).

Authority for Requirement: LCPH ATI 5669 / PTO 5676

LCO 10.9(2)
LCO 10.9(2)(a) "22"

Operating Limits:

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

- B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.
- C. This facility shall meet all applicable requirements of 40 CFR 60 [NSPS Subpart A] to comply with LCCO 10.9(2).
- D. This facility shall meet the applicable standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles of 40 CFR §60.254 [NSPS Subpart Y] to comply with LCCO 10.9(2)(22).
- E. This facility shall meet the performance tests and other compliance requirements of 40 CFR §60.255 [NSPS Subpart Y] to comply with LCCO 10.9(2)(22).
- F. This facility shall meet the test methods and procedures of 40 CFR §60.257 [NSPS Subpart Y] to comply with LCCO 10.9(2)(22).

Authority for Requirement: LCPH ATI 5669 / PTO 5676

Operating Condition and 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 maintain records of all maintenance completed on the control device.
- C. Notification and record keeping requirements for NSPS Subpart A shall be done in accordance with 40 CFR §60.7.
- D. General notification and reporting requirements for NSPS Subpart A shall be done in accordance with 40 CFR §60.19.
- E. Reporting and recordkeeping for NSPS Subpart Y shall be done in accordance with 40 CFR §60.258.

Authority for Requirement: LCPH ATI 5669 / PTO 5676

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)
111	5669 / 5676	18.03	V	48	Ambient	37800

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 – Opacity

Stack Test to be Completed by – Date specified pursuant to 40 CFR §60.255

Test Method – 40 CFR 60, Appendix A, Method 9

Authority for Requirement – 567 IAC 22.108(3)

LCO 10.9(2)(a) "22"

40 CFR 60 Subpart Y

Pollutant – Particulate Matter

Stack Test to be Completed by – Date specified pursuant to 40 CFR §60.255

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

Authority for Requirement – 567 IAC 22.108(3)

LCO 10.9(2)(a) "22"

40 CFR 60 Subpart Y

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).

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 113

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
113	113	Germ Fluid Bed Dryer Section 5	Germ	12.5 tph (dry basis)	CE-113	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
113	PM/PM ₁₀	0.09 lb/hr	LCPH ATI 4223 / PTO 4209
	SO ₂	1.2 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
113	Opacity	20%	LCPH ATI 4223 / PTO 4209 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4223 / PTO 4209 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO ₂	500 ppmv	LCPH ATI 4223 / PTO 4209 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 used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 4223 / PTO 4209

Operating Limits:

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

B. The facility shall be limited to a grind rate of 110,000 bushels/day based on a 12-month rolling total.

Authority for Requirement: LCPH ATI 4223 / PTO 4209

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 pressure differential across the cyclone on a weekly basis.

B. Monitor and record "no visible emissions" on a weekly basis.

C. Record all maintenance and repair completed on the control device.

D. The facility shall monitor and record the grind rate on a daily basis.

Authority for Requirement: LCPH ATI 4223 / PTO 4209

Reporting:

Submit quarterly emissions report summarizing the following item by the 30th of each month for the previous quarter (Jan. 30, Apr. 30, Jul. 30, and Oct. 30).

A. Submit a quarterly report of the facility's average daily grind rate for each month of the quarter.

Authority for Requirement: LCPH ATI 4223 / PTO 4209

Consent Decree:

This emission unit is subject to VOC and CO requirements as required by the Consent Decree. Please see the "Plant-Wide Conditions" section and Appendix A of this permit for specific Consent Decree language regarding this emission unit.

Authority for Requirement: Civil Action Number 05-2037JMR/FLN
567 IAC 22.108(1)

Monitoring Requirements

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

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 115

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
115	115	Bulk Truck Loadout	Starch	14 tph	CE-115	Baghouse

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
115	VOC	0.01 lb/hr; 0.06 tpy	LCPH ATI 2739 / PTO 3668
	THAP	0.00 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
115	Opacity	20%	LCPH ATI 2739 / PTO 3668 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2739 / PTO 3668 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 fabric filter dust collector 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 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 2739 / PTO 3668

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 2739 / PTO 3668

Operating Condition Monitoring and Recordkeeping:

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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 2739 / PTO 3668

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)
115	2739 / 3668	33.2	H	5 x 4	Ambient	4123

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 116

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
116	116	#5 Starch Dryer	Starch	2 tph	CE-116	Baghouse
	116B	Starch Dryer Burner	Natural Gas	18 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
116	PM/PM ₁₀	2.18 lb/hr; 8.74 tpy	LCPH ATI 2992 / PTO 3669
	NO _x	2.37 lb/hr	
	VOC	4.03 lb/hr; 17.65 tpy	
	CO	1.48 lb/hr	
	THAP	1.01 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
116	Opacity	20%	LCPH ATI 2992 / PTO 3669 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2992 / PTO 3669 567 IAC 23.4(7) LCO 10.9(1)"g"
	PM	0.6 lb/MMBtu	LCPH ATI 2992 / PTO 3669 567 IAC 23.3(2)(b)"2" LCO 10.8(2)"a"
	SO ₂	500 ppmv	LCPH ATI 2992 / PTO 3669 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 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 "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 2992 / PTO 3669

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. This unit shall be limited to 8,004 hours of operation per 12-month rolling period.
- C. Fuel in this unit shall be limited to natural gas only.
- D. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 2992 / PTO 3669

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 record all maintenance and repair completed on the control device.
- D. During the first twelve (12) months of operation, determine the cumulative hours of operation for each month of operation
- E. After the first twelve (12) months of operation, determine the annual hours of operation on a rolling-12-month basis for each month of operation.
- F. The owner or operator shall maintain records which indicate natural gas is the only fuel used for combustion.

Authority for Requirement: LCPH ATI 2992 / PTO 3669

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)
116	2992 / 3669	115.6	V	40	197	52193

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required?
Facility Maintained Operation & Maintenance Plan Required?
Compliance Assurance Monitoring (CAM) Plan Required?

Yes No
Yes No
Yes No

Compliance Assurance Monitoring Plan Baghouse for PM Control Emission Point 116

I. Background

A. Emissions Unit

Description: Specialty Starch Spray Dryer
Identification: EU-116
Facility: Cargill, Inc.

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No: LCPH PTO 3669
Emission limits: PM/PM10: 2.18 lb/hr; 8.74 tpy
PM: 0.1 gr/dscf

C. Control Technology Baghouse

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment indicators: differential pressure across the baghouse and no visible emissions observations. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance, if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range during normal operations, not including startup and shutdown events. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion must be reported in the Annual Compliance Certification Report.
- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

1. Indicator	Pressure differential across the baghouse	Visible emissions observations
Measurement Approach	Daily inspection of pressure differential across the baghouse	Daily inspection of visible emissions from the baghouse
2. Indicator Range	An excursion is defined as a pressure differential less than 0.1" w.c. or greater than 8.0" w.c. Excursions trigger an inspection, corrective action and a recordkeeping requirement.	An excursion is defined as visible emissions. Excursions trigger an inspection, corrective action and a recordkeeping requirement.
3. Performance Criteria		
A. Data Representativeness	An observation of pressure differential below 0.1" w.c. or greater than 8" w.c. could reveal a decrease in the performance of the control equipment and potentially result in an increase of PM emissions if corrective actions are not initiated.	An observation of visible emissions could reveal a decrease in the performance of the control equipment and potentially result in an increase of PM emissions if corrective actions are not initiated.
B. Recordkeeping and Reporting (Verification of Operational Status)	Daily differential pressure readings Record any excursions and corrective actions, inspections and maintenance resulting from readings outside the indicator range.	Daily visible emissions observations. Record any excursions and corrective actions, inspections and maintenance resulting from the inspection.
C. QA/QC Practices and Criteria	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.	Observe no emissions are being emitted. If an emission is seen, the system is immediately shut down for review.
D. Monitoring Frequency	The pressure differential will be monitored on a daily basis when the baghouse is operating.	Visual observation is conducted daily.
E. Data Collection Procedures	Differential pressure readings are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.	Visual observations are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.
F. Averaging Period	None	None

III. Justification

A. Background

The pollutant specific emission unit is the #5 starch dryer. Daily baghouse operating requirements include monitoring and evaluations of various parameters, recordkeeping, preventative maintenance, and the appropriate response to any malfunctions.

B. Rationale for Selection of Performance Indicator

Pressure differential monitoring was selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the PM emission standard. A pressure differential less than 0.1" w.c. or greater than 8.0" w.c. is indicative of a potential increase in emissions due to a decrease in the performance of the baghouse. Therefore, the detection of minimal or excessive pressure is used as a performance indicator.

Visible emissions observations were selected as the secondary performance indicator. When the baghouse is operating properly, there will not be any visible emissions from the exhaust. Therefore, visible emissions are used as a performance indicator.

C. Rationale for Selection of Indicator Level

The range selected for the pressure differential across the baghouse is a reflection of historical normal operating conditions for the baghouse. A stack test was successfully completed on May 5, 2010. The pressure differential across the baghouse was recorded for this test. Emissions of PM were in compliance with permit conditions. An indicator range of no visible emissions was selected because an increase in visible emissions is indicative of an increase in PM emissions.

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 118

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
118	118	Salt Storage Bin Vent	Sodium Sulfate	12.5 tph (dry basis)	CE-118	Baghouse

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	0.01 gr/dscf; 0.09 lb/hr; 0.39 tpy	LCPH ATI 4276 / PTO 4264

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
118	Opacity	20%	LCPH ATI 4276 / PTO 4264 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 maintained in proper operating condition and shall be in use any time the sodium sulfate bin is loaded. A magnahelic shall be installed and operating in order to determine the differential pressure across the dust collector. This gauge should be easily accessible to Cargill and air pollution control personnel.

Authority for Requirement: LCPH ATI 4276 / PTO 4264

Operation Limits:

The maximum operating capacity of this device is:

Loading Rate: 25,000 lb/hr (dry basis)

Airflow Rate: 1100 scfm ± 10%

Airflow to the dust collector shall be limited to 1100 scfm ± 10%. Any increase in the exhaust airflow rate would be considered a modification and would require a new Authorization to Install/Modify permit.

Authority for Requirement: LCPH ATI 4276 / PTO 4264

Compliance Monitoring Requirements:

The following information shall be monitored:

- Weekly pressure differential readings
- Weekly opacity observations while the bin(s) are being loaded (non CFR reference Method 9)*
- Weekly throughput rate

*If visible emissions are observed, corrective actions should take place within 8 hours of the observation or by the start of the next working day.

All monitors shall be easily accessible to air pollution regulatory personnel.

Authority for Requirement: LCPH ATI 4276 / PTO 4264

Record keeping Requirements:

A log of operation shall be maintained for the above listed unit. The following information shall be recorded and kept on site for a period of no less than five years.

- Weekly pressure differential readings
- Weekly opacity observations while the bin(s) are being loaded (non CFR reference Method 9)*
- Weekly throughput rate
- Records of all maintenance performed on the dust collector
- Any changes in operation that would affect emissions, including changes in fan speed

*If visible emissions are observed, corrective actions should take place within 8 hours of the observation or by the start of the next working day.

These records shall be available on site at all times for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 4276 / PTO 4264

Monitoring Requirements

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

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 119, 120, 121

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
119	119	#19 Starch Bulk Storage Bin	Starch	2 tph	CE-119	Baghouse
120	120	#20 Starch Bulk Storage Bin	Starch	2 tph	CE-120	Baghouse
121	121	#21 Starch Bulk Storage Bin	Starch	2 tph	CE-121	Baghouse

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
119	PM/PM ₁₀	0.05 lb/hr	LCPH ATI 6392 / PTO
120	VOC	0.08 lb/hr; 0.36 tpy	LCPH ATI 6393 / PTO
121	THAP	0.02 lb/hr	LCPH ATI 6394 / PTO

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
119 120 121	Opacity	20%	LCPH ATI 6392 / PTO LCPH ATI 6393 / PTO LCPH ATI 6394 / PTO LCO 10.7
119 120 121	PM	0.1 gr/dscf	LCPH ATI 6392 / PTO LCPH ATI 6393 / PTO LCPH ATI 6394 / PTO 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 fabric filter dust collector 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 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 6392 / PTO
LCPH ATI 6393 / PTO
LCPH ATI 6394 / PTO

Operating Limits:

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

Authority for Requirement: LCPH ATI 6392 / PTO
LCPH ATI 6393 / PTO
LCPH ATI 6394 / PTO

Operating Condition Monitoring and Recordkeeping:

- 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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 6392 / PTO
 LCPH ATI 6393 / PTO
 LCPH ATI 6394 / PTO

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)
119	6392 /	105.3	D	4.5 x 3.5	70	600
120	6393 /	105.3	D	4.5 x 3.5	70	600
121	6394 /	105.3	D	4.5 x 3.5	70	600

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 124

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
124	124	Packer Hopper Vent	Corn	20 tph	CE-124	Bag Filter

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
124	PM/PM ₁₀	0.035 lb/hr	LCPH ATI 4457 / PTO 4478
	VOC	0.01 lb/hr; 0.06 tpy	
	THAP	0.00 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
124	Opacity	20%	LCPH ATI 4457 / PTO 4478 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 may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. 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 4457 / PTO 4478

Operational Limits:

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

Authority for Requirement: LCPH ATI 4457 / PTO 4478

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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 4457 / PTO 4478

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)
124	4457 / 4478	66.8	D	5 x 6	70	410

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 130

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
130	130	Corn Silos 1 through 4	Corn	600 tph	CE-130	Single Sock Filter

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
130	PM/PM ₁₀	0.01 gr/dscf; 0.04 lb/hr	LCPH ATI 6069 / PTO 5795

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
130	Opacity	20%	LCPH ATI 6069 / PTO 5795 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6069 / PTO 5795 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 single sock filter 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 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 6069 / PTO 5795

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 6069 / PTO 5795

Operating Condition Monitoring and Recordkeeping:

A. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly 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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 6069 / PTO 5795

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)
130	6069 / 5795	127.26	VR	20	Ambient	462

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 1 (Utilities):

Emission Point ID Number: 142

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
142	142	Generator 2	Diesel Fuel	19.4 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.

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
142	Opacity	20%	LCO 10.7
	PM	0.6 lb/MMBtu	LCO 10.8(2)"b"
	SO ₂	1.5 lb/MMBtu	LCO 10.12(1)"b"

Operational Limits & Requirements

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

NESHAP Applicability:

A. This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ].

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

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)

Process Group 4 (Food Starch):

Emission Point ID Number: 149

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
149	149	Starch Bulk Bagger	Starch	15 tph	CE-149	Baghouse

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
149	PM/PM ₁₀	0.02 gr/dscf	LCPH ATI 2977 / PTO 3662
	VOC	0.20 lb/hr; 0.90 tpy	
	THAP	0.05 lb/hr;	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
149	Opacity	20%	LCPH ATI 2977 / PTO 3662 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 2977 / PTO 3662 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 and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 2977 / PTO 3662

Operating Limits:

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

Authority for Requirement: LCPH ATI 2977 / PTO 3662

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 or 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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 2977 / PTO 3662

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)
149	2977 / 3662	39.7	D	9 x 5.5	70	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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 153

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
153	153	Sodium Sulfate Receiving	Sodium Sulfate	12.5 tph	CE-153	Baghouse

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
153	PM/PM ₁₀	0.04 lb/hr	LCPH ATI 5677 / PTO 5439

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
153	Opacity	20%	LCPH ATI 5677 / PTO 5439 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5677 / PTO 5439 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 and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5677 / PTO 5439

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 5677 / PTO 5439

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

A. The owner or operator shall monitor and record 'no visible emissions' 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.

B. The owner or operator shall maintain records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5677 / PTO 5439

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)
153	5677 / 5439	8.05	V	6	70	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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 155

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
155	155	Industrial Grade Packer Blower	Starch	20 tph	CE-155	Dust Collector

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
155	PM/PM ₁₀	0.45 lb/hr	LCPH ATI 3715 / PTO 4212

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
155	Opacity	20%	LCPH ATI 3715 / PTO 4212 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 3715 / PTO 4212 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 emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 3715 / PTO 4212

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.
- C. The owner or operator shall produce no more than 105,000 tons of oxidized starch per rolling 12-month period.

Authority for Requirement: LCPH ATI 3715 / PTO 4212

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 or 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 records of all maintenance completed on the control device.
- D. The owner or operator shall record monthly the amount of oxidized starch produced. Calculate and record 12-month rolling totals.

Authority for Requirement: LCPH ATI 3715 / PTO 4212

Emission Point Characteristics

This 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)
155	3715 / 4212	44	H	24	70	5280

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 – PM

1st Stack Test to be Completed by – October 31, 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)

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 160

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
160	160A	PO Storage	Starch	12.1 tph	CE-160	Packed Bed Scrubber
	160C	Reactor #131				
	160D	Reactor #132				
	160E	Reactor #134				
	160F	Reactor #135				
	160H	Stripper #2				

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
160	VOC	105 ppmv; 4.32 lb/hr; 18.92 tpy	LCPH ATI 5876 / PTO 5740
	SHAP	105 ppmv	
	THAP	105 ppmv; 4.32 lb/hr; 18.92 tpy	

Operational Limits & Requirements

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

Control Device:

A Bionomics Series Model 76 FRP countercurrent packed bed wet scrubber shall be installed to control VOC/VHAP emissions. The control equipment shall be maintained properly and operate 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 5876 / PTO 5740

Operating Limits

- The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- The recirculation water flow rate in the scrubber shall be no less than 100 gpm.
- The differential pressure across the control equipment shall be maintained between 0.1" to 4.5" w.c.

Authority for Requirement: LCPH ATI 5876 / PTO 5740

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 owner or operator shall maintain a record of all maintenance completed on the control device.
- The owner or operator shall monitor and record the recirculation water flow rate in the scrubber on a weekly basis.
- The owner or operator shall monitor and record the differential pressure across the scrubber on a weekly basis.

Authority for Requirement: LCPH ATI 5876 / PTO 5740

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 (scfm)
160	5876 / 5740	50.1	V	24	70	6000

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 161

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
161	161A	POCL ₃ Storage Tank	Starch	12.1 ton/hr	CE-161	Packed Bed Scrubber
	161B	Sulfuric Acid Storage Tank		1,200 gallons		
	161C	Deactivation Tank		50 gallons		
	161D	Modification Tank #101		12.1 ton/hr		
	161E	Modification Tank #102		12.1 ton/hr		
	161F	Modification Tank #103		12.1 ton/hr		
	161G	Modification Tank #104		12.1 ton/hr		
	161H	nOSA Tank		7,000 gallons		
	161I	Modification Tank #105		55,000 gallons		

Applicable Requirements

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

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

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
161	PM/PM ₁₀	0.08 lb/hr	LCPH ATI 5319 / PTO 5205
	SO ₂	0.89 lb/hr	
	VOC	0.83 lb/hr; 3.62 tpy	
	THAP	0.83 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
161	Opacity	20%	LCPH ATI 5319 / PTO 5205 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5319 / PTO 5205 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO ₂	500 ppmv	LCPH ATI 5319 / PTO 5205 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, hydrochloric acid 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 5319 / PTO 5205

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The recycle water flow rate in the scrubber shall be maintained at a minimum of 20 gpm.
- C. The pressure on the inlet of the scrubber shall be maintained between -12" w.c. and -3" w.c.

Authority for Requirement: LCPH ATI 5319 / PTO 5205

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 pressure on the inlet the scrubber on a weekly basis.
- B. The owner or operator shall monitor and record recycle water flow rate in the scrubber on a weekly basis.
- C. The owner or operator shall record all maintenance and repair completed on the control device.

Authority for Requirement: LCPH ATI 5319 / PTO 5205

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)
161	5319 / 5205	44	V	12	90	1800

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 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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 162

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
162	162	Flash Dryer #6	Starch	10.1 tph	CE-162	Scrubber
	162B	Flash Dryer #6 Burner	Natural Gas	18.3 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
162	PM/PM ₁₀	3.068 lb/hr; 11.42 tpy	LCPH ATI 4274 / PTO 4460
	VOC	6.52 lb/hr; 28.57 tpy	
	CO	1.51 lb/hr	
	THAP	1.63 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
162	Opacity	20%	LCPH ATI 4274 / PTO 4460 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4274 / PTO 4460 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO ₂	500 ppmv	LCPH ATI 4274 / PTO 4460 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 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 4274 / PTO 4460

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and/or good operating practices.
- B. This unit shall be limited to 7,446 hours of operation based on 12-month rolling total.
- C. Fuel in this unit shall be limited to natural gas only.
- D. The minimum scrubber water recirculation rate shall be 150 gpm.

Authority for Requirement: LCPH ATI 4274 / PTO 4460

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 pressure differential 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 '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.
- D. The owner or operator shall record all maintenance and repair completed on the control device.
- E. The owner or operator shall monitor and record the hours of operation on a monthly and 12-month rolling total basis.
- F. The owner or operator shall maintain records which indicate natural gas is the only fuel used for combustion.

Authority for Requirement: LCPH ATI 4274 / PTO 4460

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)
162	4274 / 4460	120.7	V	78	120	43728

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 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 – PM

1st Stack Test to be Completed by – October 31, 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)

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been

unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Compliance Assurance Monitoring Plan Wet Scrubber for PM Control Emission Point 162

I. Background

A. Emissions Unit

Description: Specialty Starch Flash Dryer
Identification: EU-162
Facility: Cargill, Inc.

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No: LCPH PTO 4460
Emission limits: PM/PM10: 3.068 lb/hr; 11.42 tpy
PM: 0.1 gr/dscf

C. Control Technology Wet Scrubber

II. Monitoring Approach

General Monitoring Guidelines

- CAM involves the observation of control equipment indicators: scrubber recirculation flow rate and no visible emissions observations. This plan defines acceptable ranges for these indicators. CAM also includes control equipment inspections when excursions of the indicator have taken place and possible corrective action and maintenance, if necessary.
- Monitoring is not required during periods of time greater than one day in which the source does not operate.

Excursion from Compliance

- An excursion occurs when an observed compliance indicator is outside of its defined acceptable indicator range during normal operations, not including startup and shutdown events. An excursion does not necessarily indicate a violation of applicable permit terms, conditions, and/or requirements. However, an excursion must be reported in the Annual Compliance Certification Report.

- Corrective actions will begin as soon as possible, but no later than eight hours from the observation of the excursion.

1. Indicator	Scrubber water recirculation rate	Visible emissions observations
Measurement Approach	Daily inspection of scrubber water recirculation rate	Daily inspection of visible emissions from the scrubber
2. Indicator Range	An excursion is defined as a scrubber recirculation rate less than 150 gpm. Excursions trigger an inspection, corrective action and a recordkeeping requirement.	An excursion is defined as visible emissions. Excursions trigger an inspection, corrective action and a recordkeeping requirement.
3. Performance Criteria		
A. Data Representativeness	An observation of the recirculation rate below 150 gpm could reveal a decrease in the performance of the control equipment and potentially result in an increase of VOC emissions if corrective actions are not initiated.	An observation of visible emissions could reveal a decrease in the performance of the control equipment and potentially result in an increase of PM emissions if corrective actions are not initiated.
B. Recordkeeping and Reporting (Verification of Operational Status)	Daily flow rate readings Record any excursions and corrective actions, inspections and maintenance resulting from readings outside the indicator range.	Daily visible emissions observations. Record any excursions and corrective actions, inspections and maintenance resulting from the inspection.
C. QA/QC Practices and Criteria	All instruments and control equipment will be calibrated, maintained, and operated according to the manufacturers specifications.	Observe no emissions are being emitted. If an emission is seen, the system is immediately shut down for review.
D. Monitoring Frequency	The recirculation flow rate will be monitored on a daily basis when the scrubber is operating.	Visual observation is conducted daily.
E. Data Collection Procedures	The recirculation flow rate is recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.	Visual observations are recorded in the plant information system and will be maintained for 5 years. Operator logs and maintenance records will be kept for 5 years.
F. Averaging Period	None	None

III. Justification

A. Background

The pollutant specific emission unit is the specialty starch flash dryer. Daily baghouse operating requirements include monitoring and evaluations of various parameters, recordkeeping, preventative maintenance, and the appropriate response to any malfunctions.

B. Rationale for Selection of Performance Indicator

Recirculation flow rate monitoring was selected as the performance indicator because it is indicative of operation of the scrubber in a manner necessary to comply with the PM emission standard. A recirculation flow rate of less than 150 gpm is indicative of a potential increase in emissions due to a decrease in the performance of the scrubber. Therefore, the detection of minimal or excessive pressure is used as a performance indicator.

Visible emissions observations were selected as the secondary performance indicator. When the scrubber is operating properly, there will not be any visible emissions from the exhaust. Therefore, visible emissions are used as a performance indicator.

C. Rationale for Selection of Indicator Level

The range selected is a reflection of historical normal operating conditions for the scrubber. A stack test was successfully completed on October 24, 2012. The recirculation flow rate through the scrubber was recorded for this test. Emissions of PM were in compliance with permit conditions. An indicator range of no visible emissions was selected because an increase in visible emissions is indicative of an increase in PM emissions.

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 164, 165, 166

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
164	164	Storage Bin #104	Starch	9 tph	CE-164	Baghouse
165	165	Storage Bin #105	Starch	9 tph	CE-165	Baghouse
166	166	Storage Bin #106	Starch	9 tph	CE-166	Baghouse

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
164	PM/PM ₁₀	0.034 lb/hr	LCPH ATI 4026 / PTO 4461
165	VOC	0.11 lb/hr; 0.48 tpy	LCPH ATI 4027 / PTO 4462
166	THAP	0.03 lb/hr	LCPH ATI 4028 / PTO 4463

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
164 165 166	Opacity	20%	LCPH ATI 4026 / PTO 4461 LCPH ATI 4027 / PTO 4462 LCPH ATI 4028 / PTO 4463 LCO 10.7
164 165 166	PM	0.1 gr/dscf	LCPH ATI 4026 / PTO 4461 LCPH ATI 4027 / PTO 4462 LCPH ATI 4028 / PTO 4463 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 "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 4026 / PTO 4461
LCPH ATI 4027 / PTO 4462
LCPH ATI 4028 / PTO 4463

Operating Limits:

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

Authority for Requirement: LCPH ATI 4026 / PTO 4461
LCPH ATI 4027 / PTO 4462
LCPH ATI 4028 / PTO 4463

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 records of all maintenance completed on the control device.
- Authority for Requirement: LPCH ATI 4026 / PTO 4461
 LCPH ATI 4027 / PTO 4462
 LCPH ATI 4028 / PTO 4463

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)
164	4026 / 4461	102.4	D	3.25	70	800
165	4027 / 4462	102.3	D	3.25	70	800
166	4028 / 4463	102.3	D	3.25	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 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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required?

Yes No

Facility Maintained Operation & Maintenance Plan Required?

Yes No

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 167, 169

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
167	167	Specialty Starch Bin #107	Starch	10 tph	CE-167	Baghouse
169	169	Specialty Starch Bin #109	Starch	10 tph	CE-169	Baghouse

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
167 169	PM/PM ₁₀	0.08 lb/hr	LCPH ATI 5320 / PTO 5580 LCPH ATI 5321 / PTO 5581
	VOC	0.16 lb/hr; 0.72 tpy	
	THAP	0.04 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
167 169	Opacity	20%	LCPH ATI 5320 / PTO 5580 LCPH ATI 5321 / PTO 5581 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5320 / PTO 5580 LCPH ATI 5321 / PTO 5581 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 "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: LPCH ATI 5320 / PTO 5580
LCPH ATI 5321 / PTO 5581

Operating Limits

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LPCH ATI 5320 / PTO 5580
LCPH ATI 5321 / PTO 5581

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 records of all maintenance completed on the control device.
- Authority for Requirement: LPCH ATI 5320 / PTO 5580
 LPCH ATI 5321 / PTO 5581

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)
167	5320 / 5580	104.37	H	12	70	1200
169	5321 / 5581	111.96	H	12	70	1200

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 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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 170, 171, 173, 174, 175

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
170	170	Storage Bin Surge Hopper	Starch	12.5 tph	CE-170	Baghouse
171	171	Specialty Starch Mix Bin #1	Starch	17.5 tph	CE-171	Baghouse
173	173	Packer / Clean-up Vacuum	Starch	12.5 tph	CE-173	Baghouse
174	174	Grinder Discharge Receiver	Starch	12.5 tph	CE-174	Dust Collector
175	175	Warehouse Vacuum Receiver	Starch	12.5 tph	CE-175	Dust Collector

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
170	PM/PM ₁₀	0.016 lb/hr	LCPH ATI 4269 / PTO 4464
	VOC	0.01 lb/hr; 0.06 tpy	
	THAP	0.00 lb/hr	
171	PM/PM ₁₀	0.063 lb/hr	LCPH ATI 4270 / PTO 4465
	VOC	0.05 lb/hr; 0.22 tpy	
	THAP	0.01 lb/hr	
173	PM/PM ₁₀	0.32 lb/hr	LCPH ATI 4456 / PTO 4466
	VOC	0.75 lb/hr; 3.30 tpy	
	THAP	0.19 lb/hr	
174	PM/PM ₁₀	0.043 lb/hr	LCPH ATI 4272 / PTO 4467
	VOC	0.03 lb/hr; 0.15 tpy	
	THAP	0.01 lb/hr	
175	PM/PM ₁₀	0.013 lb/hr	LCPH ATI 4273 / PTO 4468
	VOC	0.04 lb/hr; 0.18 tpy	
	THAP	0.01 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
170 171 173 174 175	Opacity	20%	LCPH ATI 4269 / PTO 4464 LCPH ATI 4270 / PTO 4465 LCPH ATI 4456 / PTO 4466 LCPH ATI 4272 / PTO 4467 LCPH ATI 4273 / PTO 4468 LCO 10.7
	Particulate Matter	0.1 gr/dscf	LCPH ATI 4269 / PTO 4464 LCPH ATI 4270 / PTO 4465 LCPH ATI 4456 / PTO 4466 LCPH ATI 4272 / PTO 4467 LCPH ATI 4273 / PTO 4468 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 "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 4269 / PTO 4464
LCPH ATI 4270 / PTO 4465
LCPH ATI 4456 / PTO 4466
LCPH ATI 4272 / PTO 4467
LCPH ATI 4273 / PTO 4468

Operating Limits:

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

Authority for Requirement: LCPH ATI 4269 / PTO 4464
LCPH ATI 4270 / PTO 4465
LCPH ATI 4456 / PTO 4466
LCPH ATI 4272 / PTO 4467
LCPH ATI 4273 / PTO 4468

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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 4269 / PTO 4464
LCPH ATI 4270 / PTO 4465
LCPH ATI 4456 / PTO 4466
LCPH ATI 4272 / PTO 4467
LCPH ATI 4273 / PTO 4468

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)
170	4269 / 4464	69.3	V	6	70	375
171	4270 / 4465	102.3	D	3.25	70	1465
173	4456 / 4466	63.6	V	27	70	15000
174	4272 / 4467	7	H	7	70	1011
175	4273 / 4468	24	H	3.5	70	300

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 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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes ⁽¹⁾ No
⁽¹⁾ Only EP173 requires a Facility O&M Plan.

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 176

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
176	176A	Waxy Corn Silo #1	Corn	75,000 bushels	CE-176	Baghouse
176	176B	Waxy Corn Silo #2		75,000 bushels		

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
176	PM/PM ₁₀	0.129 lb/hr	LCPH ATI 4330 / PTO 4469

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
176	Opacity	20%	LCPH ATI 4330 / PTO 4469 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4330 / PTO 4469 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 4330 / PTO 4469

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" – 8.0" w.c.

Authority for Requirement: LCPH ATI 4330 / PTO 4469

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 pressure differential 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 findings and 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 4330 / PTO 4469

Emission Point Characteristics

This 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)
176	4330 / 4469	114.17	V	11.13 x 12.4	70	3000

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 1 (Utilities):

Emission Point ID Number: 210

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
210	210	500 kW Generator	Diesel Fuel	36.3 gph	CE-210	Diesel Oxidation Catalyst

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
210	PM ₁₀	0.6 lb/MMBtu	LCPH ATI 6123 / PTO 6084
	SO ₂	15 ppmv	40 CFR §80.510

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
210	Opacity	20%	LCPH ATI 6123 / PTO 6084 LCO 10.7
	PM	0.6 lb/MMBtu	LCPH ATI 6123 / PTO 6084 LCO 10.8(2)"b"
	SO ₂	1.5 lb/MMBtu	LCPH ATI 6123 / PTO 6084 LCO 10.12(1)"b"

Operational Limits & Requirements

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

Control Device:

A diesel oxidation catalyst shall be installed to control particulate matter and CO 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 6123 / PTO 6084

NESHAP Applicability:

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

Authority for Requirement: LCPH ATI 6123 / PTO 6084

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The stationary RICE shall be fired by diesel fuel #1 or #2 only.
- C. The sulfur content of any diesel fuel used in the emission unit shall not exceed 15 ppmv per 40 CFR §80.510.
- D. This emission unit shall be limited to 4,000 hours of operation based on a rolling 12-month total.
- E. The owner or operator shall meet the applicable General Provisions requirements of 40 CFR 63 (Subpart A) as indicated in 40 CFR §63.6665 to comply with LCCO 10.9(4)"a".

- F. The owner or operator shall meet the Emission and Operating Limits of 40 CFR §63.6600 to comply with LCCO 10.9(4)"zzzz".
 - G. The owner or operator shall meet the General Compliance Requirements of §63.6605 to comply with LCCO 10.9(4)"zzzz".
 - H. The owner or operator shall comply with the Testing and Initial Compliance Requirements of 40 CFR §63.66610, §63.6615, §66.6620, §63.6625 and §63.6630 to comply with LCCO 10.9(4)"zzzz".
- Authority for Requirement: LCPH ATI 6123 / PTO 6084

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 or their authorized representatives.

- A. The owner or operator shall record the number of hours the stationary reciprocating internal combustion engine (RICE) is operated each month. Calculate and record 12-month rolling totals.
- B. The owner or operator shall maintain records of all maintenance completed on the control device.
- C. The owner or operator shall obtain a fuel certification from the fuel supplier that states all diesel shipments will meet the specifications of 40 CFR §80.510 on an annual basis.
- D. The owner or operator shall comply with the applicable monitoring, installation, collection, operation and maintenance requirements of 40 CFR §63.6625.
- E. The owner or operator shall comply with Continuous Compliance Requirements of 40 CFR §63.6635 and §63.6640.
- F. The owner or operator shall submit comply with the Notifications of 40 CFR§ 63.6645.
- G. The owner or operator shall comply with the Reporting requirements of 40 CFR §63.6650.
- H. The owner or operator shall comply with the Recordkeeping requirements of 40 CFR §63.6655 and maintain them pursuant to 40 CFR §63.6660.

Authority for Requirement: LCPH ATI 6123 / PTO 6084

Semiannual Report Requirements

- A. Pursuant to 40 CFR §63.6650(b)"5" the owner or operator may postmark or deliver the semiannual compliance reports no later than March 31 and September 30 rather than January 31 or July 31. The semiannual reports must contain information in 63.6650(c)"1 through 6" and applicable information in (e)"1 through 12".

Authority for Requirement: LCPH ATI 6123 / PTO 6084

Emission Point Characteristics

This 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)
210	6123 / 6084	22	V	5	981	4000

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.

Pollutant:	CO (Inlet and Outlet of the control device)
Initial Stack Test to be Completed by:	Date specified pursuant to §63.6610 ⁽¹⁾
Subsequent Stack Tests to be Completed by:	Dates specified pursuant to §63.6620
Test Method:	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
Authority for Requirement:	567 IAC 22.108(3) 40 CFR 63 Subpart ZZZZ

⁽¹⁾ Initial compliance test was completed on November 29, 2011.

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)

Process Group 3 (Process):

Emission Point ID Number: 230

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
230	230	Cracked Corn Conveying	Corn	20 tph	CE-230	Baghouse

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
230	PM	0.051 lb/hr	LCPH ATI 4720 / PTO 4785
	PM ₁₀	0.01 gr/dscf; 0.051 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
230	Opacity	20%	LCPH ATI 4720 / PTO 4785 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4720 / PTO 4785 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 "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 4720 / PTO 4785

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" – 8.0" w.c.

Authority for Requirement: LCPH ATI 4720 / PTO 4785

Operating Condition Monitoring and Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five 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 pressure differential 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 findings and 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 4720 / PTO 4785

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 (scfm)
230	4720 / 4785	68.44	V	8	72	600

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 240

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
240	240	Starch Re-slurry System	Corn	5 tph	CE-240	Baghouse

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
240	PM/PM ₁₀	0.05 lb/hr	LCPH ATI 4855 / PTO 4862
	VOC	0.17 lb/hr; 0.75 tpy	
	THAP	0.04 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
240	Opacity	20%	LCPH ATI 4855 / PTO 4862 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4855 / PTO 4862 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 "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 4855 / PTO 4862

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.
- C. Hours of operation shall be limited to 1,752 hours per 12-month rolling total period.

Authority for Requirement: LCPH ATI 4855 / PTO 4862

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five 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 records of all maintenance completed on the control device.
- D. Monitor and record the hours of operation on a monthly and 12-month rolling total basis.

Authority for Requirement: LCPH ATI 4855 / PTO 4862

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)
240	4855 / 4862	84.3	V	9	70	1250

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 245

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
245	245	East Gluten Bin	Gluten	18 tph	CE-245	Baghouse

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
245	PM/PM ₁₀	0.1 lb/hr	LCPH ATI 4998 / PTO 5034
	VOC	0.16 lb/hr; 0.68 tpy	
	THAP	0.04 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
245	Opacity	20%	LCPH ATI 4998 / PTO 5034 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 4998 / PTO 5034 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 may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 4998 / PTO 5034

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 4998 / PTO 5034

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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 4998 / PTO 5034

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)
245	4998 / 5034	76.7	V	7	82	1163

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 246

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
246	246	Dried Gluten Receiver	Gluten	7.5 tph	CE-246	Baghouse

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
246	PM/PM ₁₀	0.09 lb/hr	LCPH ATI 5173 / PTO 5146
	VOC	0.14 lb/hr; 0.63 tpy	
	THAP	0.04 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
246	Opacity	20%	LCPH ATI 5173 / PTO 5146 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5173 / PTO 5146 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 may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. 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 5173 / PTO 5146

Operating Limits:

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

Authority for Requirement: LCPH ATI 5173 / PTO 5146

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five 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 records of all maintenance completed on the control device.
 Authority for Requirement: LCPH ATI 5173 / PTO 5146

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)
246	5173 / 5146	42.6	V	8	200	1100

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 247

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
247	247	Wet Bran Conveyor	Wet Bran	45 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
247	VOC	0.00 lb/hr; 0.02 tpy	LCPH ATI 5475 / PTO 5236
	THAP	0.00 lb/hr	
	SO ₂	500 ppmv	LCPH ATI 5475 / PTO 5236 567 IAC 23.3(3)"e" LCO 10.12(2)

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)
247	5475 / 5236	67.71	V	6	140	25

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

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 248

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
248	248	Starch Slurry Tank #6	Starch	500,000 gallons	--	--

Applicable Requirements

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

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

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
248	VOC	0.05 lb/hr; 0.23 tpy	LCPH ATI 5137 / PTO 5100
	THAP	0.01 lb/hr	
	SO ₂	500 ppmv	LCPH ATI 5137 / PTO 5100 567 IAC 23.3(3)"e" LCO 10.12(2)

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)
248	5137 / 5100	45	D	10	110	377

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

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 249, 250, 251

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
249	249	East Gluten Filter Vacuum Pump	Air & Water	180,000 ft ³ /hr	--	--
250	250	Middle Gluten Filter Vacuum Pump	Air & Water	5,287 m ³ /hr	--	--
251	251	West Gluten Filter Vacuum Pump	Air & Water	2,000 ft ³ /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
249	SO ₂	0.04 lb/hr	LCPH ATI 5337 / PTO 5217
250 251	SO ₂	0.014 lb/hr	LCPH ATI 5643 / PTO 5397 LCPH ATI 5644 / PTO 5398
	VOC	0.61 lb/hr; 2.65 tpy	
	THAP	0.02 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
249, 250, 251	SO ₂	500 ppmv	LCPH ATI 5337 / PTO 5217 LCPH ATI 5643 / PTO 5397 LCPH ATI 5644 / PTO 5398 567 IAC 23.3(3)"e" LCO 10.12(2)

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)
249	5337 / 5217	35.72	VR	8	85	3000
250	5643 / 5397	35.69	VR	8	85	375 (dscfm)
251	5644 / 5398	35.86	VR	8	85	435 (dscfm)

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

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 252

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
252	252	Starch Slurry Tank #7	Starch Slurry	850,000 Gallons	--	--

Applicable Requirements

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

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

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
252	VOC	0.01 lb/hr; 0.05 tpy	LCPH ATI 5344 / PTO 5673
	THAP	0.00 tpy	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
252	SO ₂	500 ppmv	LCPH ATI 5344 / PTO 5673 567 IAC 23.3(3)"e" LCO 10.12(2)

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)
252	5344 / 5673	53.65	D	10	120	87

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

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 253

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
253	253A	Fiber Feed Surge Tank	Fiber	1.25 tph	CE-253	Packed Bed Scrubber
	253B	Rotary Valve Vent Box				
	253C	Fiber Prep Filtrate Tank				
	253D	Acid Make Down Tank				
	253E	Reactor				
	253F	Blow Tank				
	253G	Press Feed Tank				
	253H	Screw Press				
	253I	Decanter Feed Tank				
	253J	1 st Stage Screening Tank				
	253K	Whitening Reactor #1				
	253L	Whitening Reactor #2				
	253M	Caustic Tank				
	253N	White Dewatering Feed Tank				
	253O	White High Solids Storage Tank				
	253P	Final Filtrate Tank				
	253Q	Spent Liquor Tank				
	253R	Neutralization Tank				
253S	Natural Filtrate Tank					
253T	Liquor Concentration Feed Tank					
253U	2 nd Stage DSM Feed Tank					

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
253	PM/PM ₁₀	0.12 lb/hr	LCPH ATI 5426 / PTO 5675
	SO ₂	1.14 lb/hr	
	VOC	8.5 lb/hr	
	THAP	1.97 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
253	Opacity	20%	LCPH ATI 5426 / PTO 5675 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5426 / PTO 5675 567 IAC 23.4(7) LCO 10.9(1)"g"
	SO ₂	500 ppmv	567 IAC 23.3(3)"e" LCO 10.12(2)

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 PM, PM₁₀, SO₂, VOC and THAP 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 5426 / PTO 5675

Operating Limits:

- A. The packed bed scrubber on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The recycled liquor flow rate shall be greater than 8 gpm.
- C. The pH of the scrubbing liquid shall be greater than 6.9.
- D. The differential pressure across the scrubber shall be maintained between 0.1" w.c. to 8" w.c.

Authority for Requirement: LCPH ATI 5426 / PTO 5675

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five 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 pressure differential across the packed bed scrubber on a weekly basis.
- B. Monitor and record the recycled liquor flow rate on a weekly basis.
- C. Monitor and record the pH of the scrubber liquor on a weekly basis.
- D. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.
- E. Record all maintenance and repair completed on the control device.

Authority for Requirement: LCPH ATI 5426 / PTO 5675

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)
253	5426 / 5675	79.7	V	10	120	1538

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 4 (Food Starch):

Emission Point ID Number: 254

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
254	254	Slurry Tank #5	Starch Slurry	500,000 Gallons	--	--

Applicable Requirements

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

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

Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
254	VOC	0.05 lb/hr; 0.23 tpy	LCPH ATI 5416 / PTO 5674
	THAP	0.01 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
254	SO ₂	500 ppmv	LCPH ATI 5416 / PTO 5674 567 IAC 23.3(3)"e" LCO 10.12(2)

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)
254	5416 / 5674	48.28	D	8	110	377

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

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 3 (Process):

Emission Point ID Number: 255

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
255	255	Rail Germ Loadout	Germ	135 tph	CE-255	Baghouse
	255B	Germ Conveying				

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/PM ₁₀	0.04 lb/hr	LCPH ATI 5676 / PTO 5440
	VOC	0.12 lb/hr; 0.54 tpy	
	THAP	0.03 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
255	Opacity	20%	LCPH ATI 5676 / PTO 5440 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5676 / PTO 5440 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 "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 5676 / PTO 5440

Operating Limits:

- A. The control equipment on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.
- C. This unit shall be limited to 5,840 hours of operation based on a rolling 12-month total.

Authority for Requirement: LCPH ATI 5676 / PTO 5440

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five 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 findings and corrective action taken.

C. The owner or operator shall maintain records of all maintenance completed on the control device.

D. The owner or operator shall monitor and record the hours of operation on a monthly basis and apply it to a 12-month rolling total.

Authority for Requirement: LCPH ATI 5676 / PTO 5440

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	5676 / 5440	44.38	V	7	70	903

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

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 2 (Refinery):

Emission Point ID Number: 256

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
256	256	Precoat Bin from Railcar	Precoat	6.67 tph	CE-256	Baghouse

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
256	PM/PM ₁₀	0.03 lb/hr	LCPH ATI 5785 / PTO 5563

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
256	Opacity	20%	LCPH ATI 5785 / PTO 5563 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5785 / PTO 5563 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 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 5785 / PTO 5563

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 5785 / PTO 5563

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five 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 findings and corrective action taken.

C. The owner or operator shall maintain records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5785 / PTO 5563

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)
256	5785 / 5563	73.8	V	12 x 12	Ambient	700

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

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 1 (Utilities):**Emission Point ID Number: 258****Associated Equipment.**

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
258	258	500 kW Back-up Generator	Diesel Fuel	36.6 gph	CE-258	Diesel Oxidation Catalyst

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
258	PM/PM ₁₀	0.33 lb/hr	LCPH ATI 6215 / PTO 6085
	NO _x	10.58 lb/hr	
	CO	3.86 lb/hr	
	SO ₂	15 ppmv	LCPH ATI 6215 / PTO 6085 40 CFR §60.4207(b)

NSPS Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
258	PM*	0.20 g/kW-hr	LCPH ATI 6215 / PTO 6085 40 CFR 60.4205(b)
	NMHC + NO _x	6.4 g/kw-hr	
	CO	3.5 g/kw-hr	

*Filterable Only

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
258	Opacity	20%	LCPH ATI 6215 / PTO 6085 LCO 10.7
	PM	0.6 lb/MMBtu	LCPH ATI 6215 / PTO 6085 LCO 10.8(2)"b"
	SO ₂	1.5 lb/MMBtu	LCPH ATI 6215 / PTO 6085 LCO 10.12(1)"b"

Operational Limits & Requirements

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

Control Device:

A diesel oxidation catalyst shall be installed to control particulate matter and CO 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 6215 / PTO 6085

NSPS and NESHAP 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 LCCO 10.9(2)"77" and 567 IAC 23.1(2)"yyy".
 - B. 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 LCCO 10.9(4)"zzzz" and 567 IAC 23.1(4) "cz".
- Authority for Requirement: LCPH ATI 6215 / PTO 6085

Operating Limits:

- A. The owner or operator shall meet the applicable General Provisions requirements of 40 CFR §60 (Subpart A) as indicated in 40 CFR §60.4218 to comply with LCCO 10.9(2).
- B. The owner or operator shall meet the Emission Standards for Owners and Operators requirements of 40 CFR § 60.4204 and §60.4206 (NSPS Subpart IIII) to comply with LCCO 10.9(2)"77".
- C. The owner or operator shall comply with the Fuel Requirements for Owners and Operators of 40 CFR §60.4207 (NSPS Subpart IIII) to comply with LCCO 10.9(2)"77".
- D. The stationary reciprocating internal combustion engine (RICE) shall operate no more than 4,000 hours per 12-month rolling period.
- E. The stationary RICE shall be fired by diesel fuel #1 or #2 only.
- F. The sulfur content of any diesel fuel used in the emission unit shall not exceed 15 ppmv per 40 CFR §80.510(a) as referenced in 40 CFR §60.4207(b).
- G. The control equipment on this emission unit shall be maintained according to the manufacturer's specifications and good operating practices.
- H. The owner or operator shall meet the applicable General Provisions requirements of 40 CFR 63 (Subpart A) as indicated in 40 CFR §63.6665 to comply with LCCO 10.9(4)"a".
- I. The owner or operator shall meet the Emission and Operating Limits of 40 CFR §63.6600 to comply with LCCO 10.9(4)"zzzz".
- J. The owner or operator shall meet the General Compliance Requirements of §63.6605 to comply with LCCO 10.9(4)"zzzz".
- K. The owner or operator shall comply with the Testing and Initial Compliance Requirements of 40 CFR §63.66610, §63.6615, §66.6620, §63.6625 and §63.6630 to comply with LCCO 10.9(4)"zzzz".

Authority for Requirement: LCPH ATI 6215 / PTO 6085

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 or their authorized representatives.

- A. The owner or operator shall obtain a fuel certification from the fuel supplier that states all diesel shipments will meet the specifications of 40 CFR §60.4207 on an annual basis.
- B. The owner or operator shall record the number of hours the stationary internal combustion engine (ICE) is operated each month and the reason the emission unit was operated. Calculate and record 12-month rolling totals.
- C. The owner or operator shall complete all applicable recordkeeping and monitoring as required by NSPS Subpart IIII as indicated below:
 - 1. The owner or operator of the stationary ICE shall follow the monitoring requirements of 40 CFR §60.4209.
 - 2. The owner or operator of the stationary ICE shall follow the compliance requirements of 40 CFR §60.4211.
 - 3. The owner or operator of the stationary ICE shall follow the notification, reporting, and recordkeeping requirements of 40 CFR §60.4214.
- D. The owner or operator shall comply with the applicable monitoring, installation, collection, operation and maintenance requirements of 40 CFR §63.6625.
- E. The owner or operator shall comply with Continuous Compliance Requirements of 40 CFR §63.6635 and §63.6640.
- F. The owner or operator shall submit comply with the Notifications of 40 CFR §63.6645.
- G. The owner or operator shall comply with the Reporting requirements of 40 CFR §63.6650.

H. The owner or operator shall comply with the Recordkeeping requirements of 40 CFR §63.6655 and maintain them pursuant to 40 CFR §63.6660.
 Authority for Requirement: LCPH ATI 6215 / PTO 6085

Semiannual Report Requirements

A. Pursuant to 40 CFR §63.6650(b)"5" the owner or operator may postmark or deliver the semiannual compliance reports no later than March 31 and September 30 rather than January 31 or July 31. The semiannual reports must contain information in 63.6650(c)"1 through 6" and applicable information in (e)"1 through 12".
 Authority for Requirement: LCPH ATI 6215 / PTO 6085

Emission Point Characteristics

This 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)
258	6215 / 6085	14	V	6	942	3842

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.

Pollutant:	CO (Inlet and Outlet of the control device)
Initial Stack Test to be Completed by:	Date specified pursuant to §63.6610 ⁽¹⁾
Subsequent Stack Tests to be Completed by:	Dates specified pursuant to §63.6620
Test Method:	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
Authority for Requirement:	567 IAC 22.108(3) 40 CFR 63 Subpart ZZZZ

⁽¹⁾ Initial compliance test was completed on March 6, 2012.

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)

Process Group 3 (Process):

Emission Point ID Number: 259

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
259	259	EFA Soy Hull Unload	Soy Hulls	3 tph	CE-259	Baghouse

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
259	PM/PM ₁₀	0.009 lb/hr	LCPH ATI 6024 / PTO 5916

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
259	Opacity	20%	LCPH ATI 6024 / PTO 5916 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6024 / PTO 5916 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 may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 6024 / PTO 5916

Operating Limits:

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

B. The differential pressure across the baghouse shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 6024 / PTO 5916

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 records of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 4998 / PTO 5034

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)
259	6024 / 5916	77	V	3	Ambient	212

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 7 (Specialty Starch):

Emission Point ID Number: 260

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
260	260	East Dilute Phase Pot	Starch	7.5 tph	CE-260	Cartridge Filters

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	0.014 lb/hr	LCPH ATI 6380 / PTO 6099
	VOC	20 ppm	
	THAP	5 ppm	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
260	Opacity	20%	LCPH ATI 6380 / PTO 6099 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6380 / PTO 6099 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 cartridge filters dust collector 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 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 6380 / PTO 6099

Operating Limits:

- A. The control device shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the control device shall be maintained between 0.1" and 8.0" w.c.

Authority for Requirement: LCPH ATI 6380 / PTO 6099

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 records of all maintenance completed on the control device.
- Authority for Requirement: LCPH ATI 6380 / PTO 6099

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	6380 / 6099	8.25	H	8 x 8	Ambient	320

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 300

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
300	300	C* Film Starch Receiving Filter	Starch	7 tph	CE-300	Cartridge Filters
	301WF	C* Film Starch Weight Feeder		5.4 tph		
	310SH	C* Film Starch Hopper		7 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
300	PM/PM ₁₀	0.05 lb/hr	LCPH ATI 5456 / PTO 5447
	VOC	0.08 lb/hr; 0.37 tpy	
	THAP	0.04 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
300	Opacity	20%	LCPH ATI 5456 / PTO 5447 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5456 / PTO 5447 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 may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5456 / PTO 5447

Operating Limits:

- A. The baghouse on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" – 8.0" w.c.

Authority for Requirement: LCPH ATI 5456 / PTO 5447

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 findings and 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 5456 / PTO 5447

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)
300	5456 / 5447	92.42	V	8	70	622

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

- Agency Approved Operation & Maintenance Plan Required?**
- Facility Maintained Operation & Maintenance Plan Required?**
- Compliance Assurance Monitoring (CAM) Plan Required?**

Yes No

Yes No

Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 320

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
320	320	Starch Dryer	Starch	7 tph	CE-320	Vane Cage Wet 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
320	PM/PM ₁₀	0.73 lb/hr	LCPH ATI 5043 / PTO 5583
	VOC	2.93 lb/hr; 12.85 tpy	
	THAP	1.17 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
320	Opacity	20%	LCPH ATI 5043 / PTO 5583 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5043 / PTO 5583 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 vane cage wet scrubber shall be installed to control particulate matter and hydrochloric acid emissions. The control equipment may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5043 / PTO 5583

Operating Limits:

- A. The recycled liquor flow rate in the scrubber shall be no less than 28 gpm.
- B. The scrubber on this unit shall be maintained according to the manufacturer's specifications and good operating practices.

Authority for Requirement: LCPH ATI 5043 / PTO 5583

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 recycled liquor flow rate in the scrubber on a weekly basis.
- B. 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.

C. Maintain a record of all maintenance completed on the control device.

Authority for Requirement: LCPH ATI 5043 / PTO 5583

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)
320	5043 / 5583	95.5	V	20	171	10232

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 330, 340, 350, 360, 370

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
330	330	Sifter Receiving Filter	Starch	7 tph	CE-330	Baghouse
340	340	Sifter Venting Filter		7 tph	CE-340	Cartridge Filters
350	350	Final Product Hopper		7 tph	CE-350	Cartridge Filters
360	360	Dry Powder Receiving Filter		7 tph	CE-360	Cartridge Filters
370	370	C* Film Loadout Surge Hopper		5 tph	CE-370	Bin Vent Filters

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
330	PM/PM ₁₀	0.05 lb/hr	LCPH ATI 5044 / PTO 5448
	VOC	0.08 lb/hr; 0.37 tpy	
	THAP	0.04 lb/hr	
340	PM/PM ₁₀	0.01 lb/hr	LCPH ATI 5045 / PTO 5449
	VOC	0.02 lb/hr; 0.08 tpy	
	THAP	0.01 lb/hr	
350	PM/PM ₁₀	0.03 lb/hr	LCPH ATI 5457 / PTO 5450
	VOC	0.04 lb/hr; 0.18 tpy	
	THAP	0.02 lb/hr	
360	PM/PM ₁₀	0.02 lb/hr;	LCPH ATI 5047 / PTO 5451
	VOC	0.03 lb/hr; 0.13 tpy	
	THAP	0.01 lb/hr	
370	PM/PM ₁₀	0.14 lb/hr	LCPH ATI 5458 / PTO 5452
	VOC	0.22 lb/hr; 0.95 tpy	
	THAP	0.11 lb/hr	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
330 340 350 360 370	Opacity	20%	LCPH ATI 5044 / PTO 5448 LCPH ATI 5045 / PTO 5449 LCPH ATI 5457 / PTO 5450 LCPH ATI 5047 / PTO 5451 LCPH ATI 5458 / PTO 5452 LCO 10.7
330 340 350 360 370	PM	0.1 gr/dscf	LCPH ATI 5044 / PTO 5448 LCPH ATI 5045 / PTO 5449 LCPH ATI 5457 / PTO 5450 LCPH ATI 5047 / PTO 5451 LCPH ATI 5458 / PTO 5452 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 may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

- Authority for Requirement: LCPH ATI 5044 / PTO 5448
- LCPH ATI 5045 / PTO 5449
- LCPH ATI 5457 / PTO 5450
- LCPH ATI 5047 / PTO 5451
- LCPH ATI 5458 / PTO 5452

Operating Limits:

- A. The baghouse on this unit shall be maintained according to the manufacturer's specifications and good operating practices.
- B. The differential pressure across the baghouse shall be maintained between 0.1" – 8.0" w.c.

- Authority for Requirement: LCPH ATI 5044 / PTO 5448
- LCPH ATI 5045 / PTO 5449
- LCPH ATI 5457 / PTO 5450
- LCPH ATI 5047 / PTO 5451
- LCPH ATI 5458 / PTO 5452

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 findings and 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 5044 / PTO 5448
- LCPH ATI 5045 / PTO 5449
- LCPH ATI 5457 / PTO 5450
- LCPH ATI 5047 / PTO 5451
- LCPH ATI 5458 / PTO 5452

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)
330	5044 / 5448	92.80	V	8	95	640
340	5045 / 5449	92.90	V	8	95	134
350	5457 / 5450	44.04	V	8	113	320
360	5047 / 5452	43.66	V	8	113	233
370	5458 / 5452	67.96	V	12	72	1600

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

- | | | |
|-----------------------------------------------------------------------|------------------------------|----------------------------------------|
| Agency Approved Operation & Maintenance Plan Required? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Facility Maintained Operation & Maintenance Plan Required? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| Compliance Assurance Monitoring (CAM) Plan Required? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> |

Authority for Requirement: 567 IAC 22.108(3)

Process Group 5 (Industrial Starch):

Emission Point ID Number: 380

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
380	380	C* Cooling Tower	Water	24,000 gph	CE-380	Drift 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
380	PM/PM ₁₀	0.02 lb/hr	LCPH ATI 5459 / PTO 5453

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
380	Opacity	20%	LCPH ATI 5459 / PTO 5453 LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 5459 / PTO 5453 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 drift eliminator shall be installed to control particulate matter emissions. The control equipment may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5459 / PTO 5453

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 2,000 parts per million by weight (2,000 mg/L) for any single sampling event.

Authority for Requirement: LCPH ATI 5459 / PTO 5453

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 material safety data sheet of all water treatment chemicals used.
- B. The owner or operator shall maintain records of the manufacturer's design guarantee.

Authority for Requirement: LCPH ATI 5459 / PTO 5453

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)
380	5459 / 5453	31.45	V	84	93	104600

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 4 (Food Starch):

Emission Point ID Number: 390

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
390	390	Food Starch Sifter	Starch	19 tph	CE-390	Cartridge Filters

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
390	PM/PM ₁₀	0.11 lb/hr	LCPH ATI 6395 / PTO
	VOC	5 ppm	
	TVHAP	1.25 ppm	

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
390	Opacity	20%	LCPH ATI 6395 / PTO LCO 10.7
	PM	0.1 gr/dscf	LCPH ATI 6395 / PTO 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 cartridge filters dust collector shall be installed to control particulate matter emissions. The control equipment may be shut down while discharging product from the bin while at the same time not actively filling the bin to ensure product quality and as long as no visible emissions are observed during this process. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 6395 / PTO

Operating Limits:

A. The control device shall be maintained according to the manufacturer's specifications and good operating practices.

B. The differential pressure across the control device shall be maintained between 0.1" – 8.0" w.c.

Authority for Requirement: LCPH ATI 6395 / PTO

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 findings and 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 6395 / PTO

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)
390	6395 /	55	V	7	110	1250

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.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Process Group 1 (Utilities):

Emission Point ID Number: 516

Associated Equipment.

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
516	516	Refinery Loadout Boiler	Natural Gas	8.4 MMBtu/hr	--	--

Applicable Requirements

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

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

General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
516	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.

NESHAP Applicability:

This equipment is subject to the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63 Subpart DDDDD].

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD

Monitoring Requirements

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

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required?

Yes No

Facility Maintained Operation & Maintenance Plan Required?

Yes No

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

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

G1. Duty to Comply

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

G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Windsor Heights, Iowa 50324, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permits, 11201 Renner Blvd., Lenexa, KS 661219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

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

G5. Semi-Annual Monitoring Report

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

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

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

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

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

G8. Duty to Provide Information

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

G9. General Maintenance and Repair Duties

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

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.

3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.

4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

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

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

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

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

G13. Hazardous Release

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

discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. 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. Oral 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 oral 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 oral report may be made 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 oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

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

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which 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 must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. 567 IAC 22.108(16)

G15. Permit Deviation Reporting Requirements

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

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

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

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

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act.
- e. The changes comply with all applicable requirements.
- f. For such a 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 is required to do 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 Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

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 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.

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 a 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, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant 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, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113 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 22.105(1)"a"(4)

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 567 IAC 22.1(1)

G20. Asbestos

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

G21. Open Burning

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

G22. Acid Rain (Title IV) Emissions Allowances

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

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

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

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce

- pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

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

mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

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

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

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

G25. Permit Shield

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

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

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

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

- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
- d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

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

G27. Property Rights

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

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *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. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. 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. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting

the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

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

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

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

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

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

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

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

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

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

Field Office 1

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

Field Office 2

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

Field Office 3

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

Field Office 4

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

Field Office 5

401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6

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

Polk County Public Works Dept.

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

Linn County Public Health Dept.

Air Quality Services Branch
501 13th St., NW
Cedar Rapids, IA 52405
(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://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=e7ec1c093caf236240bc76aae014e00e&rqn=div6&view=text&node=40:7.0.1.1.1.11&idno=40>

40 CFR part 60 Subpart Y - *Standards of Performance for Coal Preparation Plants*

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

<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=c2c93546747f0d107420ab3f61fa9729&rqn=div6&view=text&node=40:7.0.1.1.1.41&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://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=69af4864b732ae63b887dc220a45aea8&rqn=div6&view=text&node=40:7.0.1.1.1.97&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://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&rqn=div6&view=text&node=40:14.0.1.1.1.1&idno=40>

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

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

<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=f39a1178b1904e00ab5591439e07efea&rqn=div6&view=text&node=40:14.0.1.1.1.5&idno=40>

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 NSPS can be found at the link below:

http://www.epa.gov/region07/air/toxics/mact_standard_contacts.htm

Appendix B: Consent Decree 05-2037JMR/FLN

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

UNITED STATES,)
)
Plaintiff,)
)
and the STATES OF ALABAMA, GEORGIA,)
ILLINOIS, INDIANA, IOWA, MISSOURI,)
NEBRASKA, NORTH CAROLINA, NORTH)
DAKOTA, AND OHIO; and the IOWA)
Counties of LINN and POLK, the OHIO)
County of MONTGOMERY, and the)
TENNESSEE County of SHELBY and City of)
MEMPHIS,)
)
)
Plaintiff-Intervenors,)
)
)
v.)
)
CARGILL, INCORPORATED,)
)
Defendant.)

Civil Action Number:

CONSENT DECREE

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CONSENT DECREE

WHEREAS, Plaintiff, the United States of America (hereinafter "Plaintiff" or "the United States"), on behalf of the United States Environmental Protection Agency (hereinafter "EPA"), has, simultaneously with lodging of this Consent Decree, filed a Complaint alleging that Cargill, Incorporated (hereinafter "Cargill") commenced construction of a major emitting facility and major modifications of a major emitting facility in violation of the New Source Review ("NSR") requirements at Part C and D of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7470-7492 and 7501-7515, and the regulations promulgated thereunder at 40 C.F.R. Parts 52.21 and 51.165 and State Implementation Plan ("SIP") permitting programs for construction and operation of new and modified stationary sources;

WHEREAS, the United States issued Notices of Violation related to VOC emissions for Cargill's Lafayette, Indiana oilseeds facility on May 2, 2002, Cargill's Bloomington, Illinois oilseeds facility on September 9, 2002, and all nine of Cargill's corn processing facilities on August 12, 2003;

WHEREAS, on September 9, 2003, a Notice of Violation related to VOC emissions was issued to Cargill by the Regional Air Pollution Control Agency for violations associated with its failure to comply with State of Ohio and Montgomery County air pollution control provisions related to permit and emissions control requirements for new sources of air contaminants;

WHEREAS, Notices of Violations related primarily to VOC emissions were issued to Cargill by the state of Nebraska on May 23, 2003, the state of Iowa on August 1, 2003, the Iowa county of Linn on August 1, 2003, and a Notice of Inquiry related primarily to VOC emissions

was issued to Cargill by the Memphis-Shelby County Health Department on September 30, 2003;

WHEREAS, the states of Alabama, Georgia, Illinois, Indiana, Iowa, Missouri, Nebraska, North Carolina, North Dakota, and Ohio; the Iowa counties of Linn and Polk, the Ohio county of Montgomery, and the Tennessee county of Shelby and city of Memphis (hereinafter collectively "Plaintiff-Intervenors"), have filed Complaints in Intervention, joining the claims alleged by the United States;

WHEREAS, Cargill does not admit the violations alleged in the Complaints and the NOV's;

WHEREAS, Cargill has worked cooperatively with the United States and the Plaintiff-Intervenors to structure a comprehensive program that will result in the installation of pollution control equipment and enforceable emission reductions of at least 40,000 tons of allowable air pollution annually from 24 Cargill facilities in 13 states;

WHEREAS, the parties agree that many of the emission reductions under the Consent Decree would not otherwise be required by law;

WHEREAS, the United States, the Plaintiff-Intervenors, and Cargill have agreed that settlement of this action is in the best interest of the parties and in the public interest, will result in air quality improvements, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter; and

WHEREAS, the United States, the Plaintiff-Intervenors, and Cargill consent to entry of this Consent Decree without trial of any issues;

NOW, THEREFORE, without any admission of fact or law, and without any admission of the violations alleged in the Complaints or NOV's, it is hereby ORDERED AND DECREED as follows:

I. JURISDICTION AND VENUE

1. The Complaints state a claim upon which relief can be granted against Cargill under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355. This Court has jurisdiction of the subject matter herein and over the parties consenting hereto pursuant to 28 U.S.C. § 1345 and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c).

II. APPLICABILITY

2. The provisions of this Consent Decree shall apply to and be binding upon the United States, the Plaintiff-Intervenors, and upon Cargill as well as Cargill's officers, employees, agents, successors and assigns for the facilities listed in Appendix A to this Consent Decree. In the event Cargill proposes to sell or transfer a facility subject to this Consent Decree before termination of the Consent Decree for that facility, it shall advise such proposed purchaser or successor-in-interest in writing of the existence of this Consent Decree, and shall send a copy of such written notification by certified mail, return receipt requested, to the EPA Regional Administrator for the region in which the facility is located and the Plaintiff-Intervenor with jurisdiction over the facility (the "Appropriate Plaintiff-Intervenor") before such sale or transfer, if possible, but no later than the closing date of such sale or transfer. Cargill shall provide a copy of the Consent Decree to the proposed purchaser or successor-in-interest. In the event Cargill

sells or otherwise assigns any of its right, title, or interest in a facility subject to this Consent Decree prior to termination of the Consent Decree for that facility, the conveyance shall not release Cargill from any obligation imposed by this Consent Decree for that facility unless the party to whom the right, title or interest has been transferred agrees in writing to fulfill the obligations of this Consent Decree for that facility.

III. FACTUAL BACKGROUND

3. Cargill is a “person” as defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e), and the federal and state regulations promulgated pursuant to the Act, and is a Delaware corporation with corporate headquarters in Minnesota.

4. Cargill owns and/or operates the corn processing and oilseed processing facilities listed in Appendix A.

5. Cargill’s corn processing and oilseeds processing facilities produce a number of value-added products including vegetable oil, starch, sweeteners, germ, ethanol, and animal feed. Production of these products results in emissions of regulated air pollutants including nitrogen oxides (“NO_x”), carbon monoxide (“CO”), sulfur dioxide (“SO₂”), particulate matter (“PM”), volatile organic compounds (“VOCs”) and hazardous air pollutants (“HAPs”).

6. Plaintiffs allege that certain of Cargill’s facilities are “major emitting facilities,” as defined by Section 169(1) of the Act, 42 U.S.C. § 7479(1), and federal, state and local regulations promulgated pursuant to the Act.

7. Cargill, individually and through its trade association, the Corn Refiners Association, voluntarily disclosed to EPA and affected state and local regulatory agencies the existence of unpermitted VOC emissions at its corn processing facilities.

8. Cargill initiated a process to correct permits for VOC emissions for all nine of its corn processing facilities in June and July 2003. Cargill also met with its state and local agencies for all facilities in July, August and September 2003 regarding the permit applications, VOC emissions and evaluation of VOC emission controls.

9. Cargill's two facilities that produce ethanol received PSD permits in 1995 (Eddyville, Iowa) and 1993 (Blair, Nebraska), and have demonstrated compliance with the Best Available Control Technology ("BACT") VOC limits for ethanol-related emission sources (fermentation vents, rectifier vents, stillage evaporators, tank farms and loadouts) in these permits.

10. Cargill's Lafayette, Indiana oilseed processing facility received a PSD permit in 2001 and complies with BACT VOC limits for the facility in this permit.

11. Cargill voluntarily invested more than \$20 million over the past eight years in process unit improvements at its extraction facilities designed to and having the effect of reducing solvent loss and lowering VOC and HAP emissions. These improvements included enhancement of condensation processes at sixteen facilities and installation of vacuum assisted desolventizing systems at Cargill's Bloomington, Illinois and Cedar Rapids West, Iowa facilities.

12. Under the terms of this Consent Decree, Cargill will optimize use of existing solvent recovery systems and commit to enforceable solvent loss rates as specified in this Consent Decree that are consistent with USEPA's most stringent BACT determination for the type of oilseeds processing plant.

13. Cargill worked to develop and voluntarily implemented use of iso-hexane, a non-hazardous air pollutant containing solvent that significantly reduces HAP emissions from extraction processes at many of its extraction facilities.

14. Under the terms of this Consent Decree, Cargill will optimize existing or install new thermal incineration emission control equipment at all feed dryers and carbon furnaces at its corn processing facilities, thereby further reducing VOC and HAP emissions from these units.

IV. COMPLIANCE PROGRAM

Program Summary. As set forth in this Part, Cargill shall implement a program of enforceable emissions reductions of SO₂, CO, NO_x, and VOCs from its corn processing and oilseeds processing plants listed in Appendix A by at least 40,000 tons per year. This includes approximate reductions of SO₂ of 15,000 tons per year, CO of 16,000 tons per year, NO_x of 2,500 tons per year, and VOC of 6,500-11,500 tons per year. Cargill shall accomplish the emission reductions through the installation of pollution control technologies and implementation of emission reduction projects in accordance with the schedules set forth in this Consent Decree. Where required, Cargill shall propose new emission limits, and submit permit applications to the applicable permitting authority to incorporate the new limits into federally-enforceable permits for the facility, and shall demonstrate compliance at all times with applicable limits through performance tests, continuous emission or operating parameter monitoring, and recordkeeping.

A. INSTALLATION OF CONTROLS AND APPLICABLE EMISSION LIMITS

Cargill shall implement the following Emission Control Plans:

15. Boiler SO₂ Emission Cap. The Plaintiff and Appropriate Plaintiff-Intervenors have reviewed Cargill's responses to Plaintiff's Clean Air Act Section 114 information request regarding the construction, modification, operation and emissions history of Cargill's coal-fired boilers, listed in Appendix B. Based on their review of the information available to Plaintiff and Plaintiff-Intervenors, the Plaintiff and Appropriate Plaintiff-Intervenors have not identified

liability for Cargill for failing to comply with New Source Review and/or Prevention of Significant Deterioration requirements for these sources.

Cargill will submit permit applications to the applicable permitting authority within three years from entry of this Consent Decree that will contain annual SO₂ emission limits for the facilities and boilers listed in Appendix B that, in aggregate, limit total annual SO₂ emissions to less than 15,355 tons per year based on a 12-month rolling sum. This represents a reduction of 15,067 tons of SO₂ per year from the current allowable emissions from these sources of 30,422 tons per year. To accommodate environmentally beneficial fuel switches to lower sulfur coal, these facilities are authorized to make changes to the coal boiler that maintain the heat input capacity of the coal boiler (including changes to coal boiler fuel receiving and handling systems and ash handling systems) that do not result in an increase in any single pollutant's emissions above current boiler allowable emission rates or an increase in the heat input to the boiler and result in an overall decrease in emissions.

16. Additional SO₂ Emission Reduction Commitment. Cargill will submit a permit application to the applicable permitting authority within three years from entry of this Consent Decree that will include individual emission limits for the Cedar Rapids (PC Boiler – 72-CB), Memphis (PC Boiler – 8301) and Decatur (Stoker Boiler – S407) coal boilers that in aggregate will not exceed a capacity weighted average SO₂ emission rate of 1.2 lb/MMBtu. This represents a greater than 44 percent reduction in the pound per million BTU emission rate of SO₂ from the 2003 capacity weighted baseline pound per million BTU emission rate for these boilers of 2.16 lb/MMBtu and a greater than 60 percent reduction from the weighted allowable pound per million BTU emission rate of 3.1 lb/MMBtu.

17. Boiler CO Emission Control Plan. Cargill will undertake and complete the CO emissions reduction and combustion optimization project described in Appendix C within five years from entry of this Consent Decree. After completion of the emissions reduction and combustion optimization project and within five years from entry of this Consent Decree, Cargill shall propose a new CO limit to the applicable permitting authority for the Eddyville coal boilers (EU 1.001, 1.002 and 1.039) of 4,374 tons per year based on a 12-month rolling sum. This represents a reduction of 10,080 tons of CO per year from the current BACT allowable emissions from these boilers of 14,454 tons per year. After completion of the emission reduction and combustion optimization project and within five years from entry of the Consent Decree, to the extent Cargill is unable to achieve the limit of 4,374 tons of CO per year, which is based on a vendor performance guarantee, Cargill shall submit to the applicable permitting authority an alternative CO limit based on the demonstrated operation of boilers following completion of the emission reduction project. By letter of June 14, 2005, IDNR expressly approves this emission reduction and combustion optimization project as a pollution control project (to the extent provided by law) that is exempt from New Source Review requirements and EPA does not object to IDNR's determination.

18. Boiler NO_x Emission Control Plan. Within the schedule set forth in Appendix D, Cargill will submit permit applications to the applicable permitting authority that will limit NO_x emissions from the units listed in Appendix D to the emission limits specified in Appendix D through the installation of controls, acceptance of enforceable operating limits and retirement of sources. This represents a reduction of at least 2,500 tons of NO_x per year from the current allowable emissions from these sources.

19. Extraction VOC Emission Control Plan for Soybean Processing Plants. Cargill will submit permit applications within three years from entry of this Consent Decree that will propose a final VOC solvent loss limit (hereinafter, also referred to as “solvent loss ratio limit” or “SLR limit”) for each conventional soybean oilseed processing facility listed in Appendix E that in aggregate will not exceed a capacity weighted average of 0.175 gallon of VOC solvent loss per ton of oilseed processed (gallon/ton) based on a 12-month rolling average. Beginning three years from the date of entry of the Consent Decree, Cargill shall begin to account for solvent loss and quantity of oilseeds processed to comply with the proposed final solvent loss limit. For each soybean processing plant, the first compliance determination will be based on the first twelve operating months of data collected after the third year from entry of the Consent Decree. For any plant that has an existing permit limit lower than the applicable solvent loss factor (“SLF”) in 40 C.F.R. Part 63, Subpart GGGG, Cargill may not propose a final solvent loss ratio limit that is less stringent than either the existing permit limit or the Solvent Extraction for Vegetable Oil Production NESHAP limit. Capacity weighted averages shall be based on the capacities for each facility as listed in Appendix E. If the design capacity for any plant listed in Appendix E changes anytime within three years from entry of this Consent Decree, Cargill will notify the Plaintiff and the Appropriate Plaintiff-Intervenors as part of the next semi-annual report required under Paragraph 36 submitted after such change occurs. Compliance with the capacity weighted average solvent loss limit shall be demonstrated using the compliance demonstration formula in Appendix E.

20. Extraction VOC Emission Control Plan for Corn Germ and Sunflower Processing Plants. Cargill will submit permit applications within three years from entry of this Consent

Decree that will propose a final VOC solvent loss ratio limit for each corn germ and sunflower processing facility listed in Appendix F that in aggregate will not exceed a capacity weighted average of 0.30 gallon/ton based on a 12-month rolling average. Beginning three years from the date of entry of the Consent Decree, Cargill shall begin to account for solvent loss and quantity of oilseeds processed to comply with the proposed final solvent loss limit. For each corn germ and sunflower processing plant, the first compliance determination will be based on the first twelve operating months of data collected after the third year from entry of the Consent Decree. For any plant that has an existing permit limit lower than the applicable solvent loss factor (“SLF”) in 40 C.F.R. Part 63, Subpart GGGG, Cargill may not propose a final VOC SLR limit that is less stringent than either the existing permit limit or the Solvent Extraction for Vegetable Oil Production NESHAP limit. Capacity weighted averages shall be based on the capacities for each facility as listed in Appendix F. If the design capacity for any plant listed in Appendix F changes anytime within three years from entry of this Consent Decree, Cargill will notify the Plaintiff and the Appropriate Plaintiff-Intervenors as part of the next semi-annual report required under Paragraph 36 submitted after such change occurs. Compliance with the capacity weighted average solvent loss limit shall be demonstrated using the compliance demonstration formula in Appendix F.

21. Extraction VOC Emission Control Plan for Specialty Processing Plants. Cargill will submit permit applications within three years from entry of this Consent Decree that will limit total solvent loss from the oilseed specialty facilities listed in Appendix G to the gallon/ton final VOC solvent loss ratio limits established in Appendix G for each facility based on a 12-month rolling average. Beginning three years from the date of entry of the Consent Decree,

Cargill shall begin to account for solvent loss and quantity of oilseeds processed to comply with the gallon/ton solvent loss limits established in Appendix G for each facility on a twelve month rolling average. For each specialty processing plant, the first compliance determination will be based on the first twelve operating months of data collected after the third year from entry of the Consent Decree.

22. Interim Solvent Loss Ratios. Beginning 90 days after lodging of this Consent Decree, Cargill will demonstrate compliance with the applicable solvent loss ratio for one facility included in Appendix G (Extraction VOC Emission Control Plan – Specialty Plants). Beginning 12 months after one year from entry of this Consent Decree, Cargill will meet for a minimum of five extraction facilities (listed on Appendices E and F) a weighted solvent loss average of 0.175 gallon/ton (for selected soybean processing plants in Appendix E), or 0.3 gallon/ton (for selected corn germ or sunflower processing plants in Appendix F) on a 12-month rolling average. Beginning 12 months after two years from entry of this Consent Decree, Cargill will meet for a minimum of ten extraction facilities (listed on Appendices E and F) a weighted solvent loss average of 0.175 gallon/ton (for selected soybean processing plants in Appendix E), or 0.3 gallon/ton (for selected corn germ or sunflower processing plants in Appendix F) on a 12-month rolling average.

23. Corn Processing VOC Emission Control Plan for Process VOC Sources. Cargill, through the installation of pollution control technologies and implementation of emission reduction projects (including emission unit elimination and heat recovery) will meet the level of control specified for the emission units included in Appendix H within the schedule established in Appendix H. Thermal oxidizers installed after lodging and according to the requirements of

this Consent Decree on emission units included in Appendix H located in ozone non-attainment areas (Dayton, Hammond, Memphis), will be designed to achieve at least 98 percent control of VOC emissions and will meet the level of control specified in Appendix H within the schedule established in Appendix H. Within five years from lodging of this Consent Decree, Cargill shall submit permit applications to the applicable permitting authority to incorporate the new VOC limits for emission units in Appendix H into federally enforceable permits for the facilities.

24. Corn Processing VOC Emission Control Plan for Integrated Feed/Bran Drying Systems. For integrated feed/bran drying systems listed in Appendix I, Cargill will optimize existing pollution control equipment (thermal oxidizers and scrubbers) and implement emission reduction projects (including emission unit elimination and heat recovery) to meet pollution control equipment operating parameters set forth in Appendix I or eliminate the emission unit within three years from lodging of this Consent Decree. Also within three years from lodging of this Consent Decree, Cargill will test and establish an allowable short-term VOC emission limit at the outlet of each scrubber stack, as set forth in Appendix I, for each integrated feed/bran drying system. Within five years from lodging of this Consent Decree, Cargill shall submit permit applications to the applicable permitting authority to incorporate the pollution control equipment operating parameters and allowable short-term VOC emission limits for integrated feed/bran drying systems listed in and established pursuant to Appendix I into federally enforceable permits.

25. Corn Processing VOC Emission Control Plan – Dayton Facility. Within five years from lodging of this Consent Decree, Cargill will submit a permit to install application (“PTI”) to the Regional Air Pollution Control Agency in Dayton, Ohio that will limit process

source VOC and boiler NO_x emissions from the group of sources listed in Appendix J (Dayton, Ohio Corn Processing Ozone Cap) to less than 854 tons per year based on a 12-month rolling sum. The 854 ton per year ozone cap reflects enforceable NO_x emissions offsets of 404 tons per year for the three boiler emissions units in Appendix J and 98 percent VOC control for the process units identified in Appendix J. The PTI application shall also propose to install new thermal incineration emission control technology designed to achieve VOC destruction efficiency of not less than 98 percent to minimize VOC emissions for the process operations identified in Appendix H as emissions units P031, P052, P057, P072 and P088. The PTI application shall also propose to optimize the control devices listed in Appendix I to meet the equipment design and operational parameters established in Appendix I to minimize VOC emissions from the integrated feed/bran drying system identified as emissions units P032, P033, P034, P037, P040, and P058. Pursuant to the emission test procedures and schedule specified in Appendix J, allowable short-term VOC emission rates shall be established for the process VOC emission units identified in Appendix J. Such allowable short-term VOC emission rates shall be proposed as part of the PTI application. Compliance with the facility ozone cap and short term VOC emission limits established pursuant to this paragraph and Appendix J satisfies the requirement to meet the Lowest Achievable Emission Rate of 98 percent. The PTI application shall also propose to install low-NO_x burner control technology for the two boilers identified in Appendix J as B004 and B006. The low-NO_x burner control technology shall result in the short-term and annual emissions rates of NO_x specified in Appendix D. Within one year of issuance of the Permit to Install, Cargill shall submit an application to incorporate the provisions of the PTI into the Title V operating permit.

Within one year from lodging of this Consent Decree, Cargill shall complete, and submit to RAPCA, an odor control optimization analysis report. The report shall include identification/speciation of potentially odorous volatile organic compounds expected to be emitted from emission units located at Cargill's Dayton, Ohio corn processing facility and subject to VOC control under Appendix H of this Consent Decree. Identification/speciation of potentially odorous compounds shall be based on review of past emissions testing and analysis at Cargill's facilities, third-party expert consultation, and reasonable review of available literature and information. The odor control optimization analysis report also shall include analysis and recommendations by a third-party expert regarding how controls mandated by the Consent Decree may be operated in a manner to reduce odor to the maximum extent practicable. Specifically, the report shall evaluate and provide recommendations regarding thermal oxidizer residence time between 0.5 and 1.0 second, thermal oxidizer operating temperature between 1200 degrees F and 1500 degrees F, and zero-hearth furnace operating temperatures between 1200 degrees F and 1500 degrees F. In making these recommendations, the third-party expert shall consider effectiveness on odor control, economic feasibility, and the potential for collateral emissions increases. In any permit applications required under this Consent Decree, for the emission units subject to VOC control under Appendix H of this Consent Decree, Cargill shall propose the operating parameters recommended by the third-party expert in the odor control optimization analysis report. Compliance with the operating parameters established pursuant to this paragraph and Appendix I shall be sufficient for purposes of compliance with Ohio Administrative Code Rule 3745-15-07(A).

26. Corn Processing Process Source CO Emission Control Plan. Cargill, through the installation of pollution control technologies and implementation of emission reduction projects (including emission unit elimination and heat recovery) will meet the level of control specified for the sources included in Appendix K within the schedule established in Appendix K. Within five years from lodging of this Consent Decree, Cargill shall submit permit applications to the applicable permitting authority to incorporate the new CO limits for sources in Appendix K into federally enforceable permits for the facilities.

27. Hammond Process Source SO₂ Emission Control Plan. Cargill, through installation of pollution control technologies and implementation of emission reductions projects (including emission unit elimination) will meet the level of control specified for the sources included in Appendix L within three years from entry of this Consent Decree. Also within three years from entry of this Consent Decree, Cargill will submit to IDEM a formal request to amend Rule 326 IAC 7-4-1.1 to incorporate the new SO₂ emission limits for sources in Appendix L into this Rule.

28. Installation of air pollution control equipment and emission reduction projects undertaken pursuant to the emission control plans under Paragraphs 15-27 are intended to abate or control atmospheric pollution or contamination by removing, reducing, or preventing the emission of pollutants, and as such, are environmentally beneficial projects and are pollution control projects to the extent provided by law.

29. Additional Federal Requirements. Upon entry of this Consent Decree, for all facilities included in Appendix A, Cargill shall identify and implement applicable New Source Performance Standards (“NSPS”) requirements codified at 40 C.F.R. Part 60. The following

NSPS may apply: Subparts D, Db and Dc (certain steam generating units), DD (certain grain elevators), Kb (certain organic liquid storage tanks), GG (certain stationary gas turbines) VV (certain synthetic organic chemical manufacturing equipment) and Y (certain coal preparation plants). Within 12 months from the date of entry of this Consent Decree, Cargill shall file an amended Toxics Release Inventory form (Form R) for the corn processing facilities listed in Appendix A to include all identified chemicals. Within 90 days from the date of entry of this Consent Decree, Cargill shall comply with any notification and reporting requirements under CERCLA Section 304, 42 U.S.C. § 11004.

B. DEMONSTRATION OF COMPLIANCE

30. Cargill shall demonstrate compliance with the requirements of Paragraphs 15-29 through the use of performance testing, continuous emission monitoring, parametric monitoring, recordkeeping and reporting, as set forth below:

a. Coal Boiler SO₂ Emission Reductions. Cargill shall demonstrate compliance with the aggregate 12-month rolling sum of 15,355 tons of SO₂ per year for coal boilers listed in Appendix B beginning 12 months after the third year from entry of the Consent Decree by compliance with the 12-month rolling sum limits established in individual permits pursuant to Paragraph 15. Monitoring of emissions will be as provided in Appendix B (Boiler SO₂ Emission Control Plan). Cargill shall demonstrate that the individual facility permit limits comply with the combined SO₂ capacity weighted average of 1.2 lb/MMBtu established pursuant to Paragraph 16 (Additional SO₂ Emission Reduction Commitment) using the compliance formula set forth in Appendix B, note 2. Where coal boiler exhaust is commingled with exhaust from other sources,

compliance with this limit will be based on emissions from only the coal boilers, provided that Cargill can accurately quantify the coal boiler emissions. Cargill shall monitor emissions as provided in Appendix B (Boiler SO₂ Emission Control Plan).

b. Boiler CO Emission Reductions. Cargill shall demonstrate compliance with the 12-month rolling sum of 4,374 tons of CO per year, or the alternative limit proposed under Paragraph 17, from the Eddyville coal boilers (EU 1.001, 1.002 and 1.039) beginning 12 months after the fifth year from entry of the Consent Decree. Cargill shall monitor emissions as provided in Appendix C (Boiler CO Emission Control Plan).

c. Boiler NO_x Emission Reductions. Within the schedule set forth in Appendix D (Boiler NO_x Emission Control Plan), Cargill shall demonstrate compliance with coal and gas boiler NO_x emission limits established pursuant to Appendix D. Cargill shall monitor emissions as provided in Appendix D, and shall conduct performance testing as provided in Appendix M (Performance Testing Plan).

d. Extraction VOC Emissions Reductions. Beginning 12 months after the first year from entry of this Consent Decree, Cargill will demonstrate at a minimum of five extraction facilities (listed on Appendices E and F) compliance with a weighted solvent loss average of 0.175 gallon/ton (for selected soybean processing plants in Appendix E), or 0.3 gallon/ton (for selected corn germ or sunflower processing plants in Appendix F) on a 12-month rolling average. Beginning 12 months after the second year from entry of this Consent Decree, Cargill will demonstrate at a minimum of ten extraction facilities compliance with a weighted solvent loss average of 0.175 gallon/ton (for selected soybean processing plants in Appendix E), or 0.3 gallon/ton (for selected

corn germ or sunflower processing plants in Appendix F) on a 12-month rolling average. Beginning 12 months after the third year from entry of the Consent Decree, Cargill will demonstrate compliance with applicable solvent loss ratios for all facilities included under Appendices E (Oilseeds Extraction VOC Emission Control Plan—Soybean Processing Plants), F (Extraction VOC Emission Control Plan—Corn Germ and Sunflower Processing Plants) and G (Extraction VOC Emission Control Plan—Specialty Processing Plants).

Compliance with the solvent loss ratio limits established pursuant to Paragraphs 19-22 shall be calculated on a monthly basis and determined in accordance with 40 C.F.R. Part 63, Subpart GGGG, with the following exceptions: (1) provisions pertaining to HAP content shall not apply; (2) solvent losses and quantities of oilseeds processed during startup and shutdown periods shall not be excluded in determining solvent losses; and (3) records shall be kept in the form of the table in Attachment N (Extraction Solvent Loss Recordkeeping Template), that show total solvent losses, solvent losses during malfunction periods, and adjusted solvent losses (i.e., total solvent losses minus malfunction losses) monthly and on a twelve month rolling average basis. Cargill may apply the provisions of 40 C.F.R. Part 63, Subpart GGGG pertaining to malfunction periods only when: (i) the malfunction results in a shutdown of the solvent extraction system; and (ii) cumulative solvent losses during malfunction periods at a plant do not exceed 4,000 gallons in a 12-month rolling period.

e. Corn Processing VOC Emission Reductions.

i. Process VOC Sources. As stated in Paragraph 23, within the schedule established in Appendix H (Corn Processing VOC Emission Control Plan), Cargill will meet the level of control specified for the sources included in Appendix H. Cargill will monitor controls and emissions as provided in Appendix H and will conduct performance testing as provided in Appendix M (Performance Testing Plan) and, where applicable, Appendix O (Carbon Furnace Test Protocol).

ii. Integrated Feed/Bran Drying Systems. As stated in Paragraph 24, within three years from lodging of the Consent Decree, Cargill will monitor and demonstrate compliance with control equipment operating parameters established under Appendix I as set forth under Appendix I. Also, within three years from lodging of the Consent Decree, Cargill will monitor control equipment and conduct testing as provided in Appendices I and M (Performance Testing Plan).

iii. Dayton Corn Processing Ozone Cap. As stated in Paragraph 25, Cargill will demonstrate compliance with the Dayton Corn Processing Ozone Cap, which reflects enforceable NO_x emissions offsets of 404 tons per year for the three boiler emission units in Appendix J and 98 percent VOC control for the process units identified in Appendix J, via the emission tracking mechanism provided in Appendix J. Such VOC and NO_x emission tracking shall begin the fifth year from lodging of the Consent Decree. Cargill shall demonstrate compliance with the 12-month rolling sum ozone cap of 854 tons for the process

source VOC and boiler NO_x emission sources listed in Appendix J during the first 11 months following the fifth year from lodging of the Consent Decree as per the schedule in Appendix J. Cargill will track VOC and NO_x emissions as provided in Appendix J (Dayton, Ohio Corn Processing Ozone Cap). NO_x emissions will be continuously monitored as provided in Appendices D (Boiler NO_x Emission Control Plan) and J (Dayton, Ohio Corn Processing Ozone Cap). To monitor VOC emissions, Cargill will develop and utilize VOC emission factors via performance testing as provided in Appendices J (Dayton, Ohio Corn Processing Ozone Cap) and M (Performance Testing Plan).

iv. Dayton, Ohio Odor Control Optimization Analysis. Within one year from lodging of this Consent Decree, Cargill shall complete, and submit to RAPCA, an odor control optimization analysis report for emission units subject to VOC control under Appendix H as required under Paragraph 25. Within five years from the date of lodging of this Consent Decree, Cargill shall implement the odor report recommendations for the emission units subject to VOC control under Appendix H.

v. Hammond, Indiana RACT Plan. Within five years from the date of lodging of this Consent Decree, Cargill shall submit the emission limits established pursuant to Paragraphs 23 and 24 and Appendices H and I as an amendment to the Hammond, Indiana facility's RACT plan; IDEM shall incorporate the emission limits into the RACT plan.

f. Corn Processing Process Source CO Emission Reductions. As stated in Paragraph 26, within the schedule established in Appendix K, Cargill will meet the level of control specified for the sources included in Appendix K (Corn Processing Process CO Emission Control Plan). Controls and emissions will be monitored as provided in Appendix K and performance testing will occur as provided in Appendix M (Performance Testing Plan) and, where applicable, Appendix O (Carbon Furnace Test Protocol).

g. Hammond Process Source SO₂ Emission Reductions. As stated in Paragraph 27, within three years from entry of this Consent Decree, Cargill will meet the level of control specified for the sources included in Appendix L (Hammond Process Source SO₂ Emission Control Plan). Controls and emissions will be monitored as provided in Appendix L and performance testing will occur as provided in Appendix M (Performance Testing Plan).

31. Continuous Emission Monitors Use and Certification. For all new Continuous Emission Monitors (“CEMs”) installed after entry and pursuant to this Consent Decree, Cargill shall install, calibrate and certify the CEMs and begin to continuously monitor emissions sufficient to meet the compliance schedules specified in Paragraph 30 and related appendices. Cargill shall thereafter continuously maintain and operate each CEM as specified in Appendices B-D.

32. Source Testing. Cargill shall conduct source testing to evaluate compliance with applicable requirements of this Consent Decree, as required under Appendix M. For each performance test that determines initial compliance or demonstration of emission limits with requirements under Appendices H and I, the performance test shall be conducted in accordance

with a protocol approved by Plaintiff and Appropriate Plaintiff-Intervenors. Testing for compliance or demonstration of emission limits for all other instances shall be conducted in accordance with a protocol approved by the Appropriate Plaintiff-Intervenors. During the source testing, all emission units shall be operated at maximum representative operating conditions. During the source testing, Cargill shall monitor, at a minimum, the operating parameters specified by Appendices B-L.

33. Initial Emissions Report. No later than 60 days after the completion of the source testing required pursuant to this Consent Decree, Cargill shall submit an Initial Emissions Report to the Plaintiff and Appropriate Plaintiff-Intervenors. This report shall include, where applicable, the source test report or a summary of emission monitoring data; Cargill's proposed emission limit as required by the emission control plans under Paragraphs 15-27; and the operating parameter(s) ranges or limits that Cargill proposes to monitor for compliance demonstration as required under this Consent Decree or Appendices B-L.

34. Proposed and Final Emission Limits. The Plaintiff and Appropriate Plaintiff-Intervenor shall set the final emission limit, and operating parameter ranges or limits, as appropriate and consistent with the provisions of this Consent Decree, taking into consideration Cargill's Initial Emissions Report under Paragraph 33, process variability, test methodology, a reasonable certainty of compliance and any other information pertinent to the specific emission unit. Cargill shall comply with the proposed emission limit immediately following submission of the Initial Report and shall comply with the Final Limit no later than 60 days following Cargill's receipt of notice from the Plaintiff and Appropriate Plaintiff-Intervenors regarding the Final Limit.

C. RECORDKEEPING AND REPORTING REQUIREMENTS

35. Data Retention. Cargill shall conduct monitoring as required by the Emission Control Plans and Paragraphs 30(a)-30(g), and shall maintain records of this monitoring data in accordance with the record retention requirements set forth in Paragraph 37.

36. Semi-annual Reports. Cargill shall submit semi-annual written reports to the Plaintiff and Plaintiff-Intervenors that describe Emission Control Plan requirements, the applicable deadlines and the dates the tasks were completed. Each report shall also contain i) any deviations from emission limitations, operational restrictions, performance testing requirements and control device operating parameter limitations, including deviations resulting from malfunctions, that have been detected by the testing, monitoring, and recordkeeping requirements specified in this Consent Decree; ii) the probable cause of such deviations; and iii) any corrective actions or preventive measures taken. If no deviations occurred during a reporting period, Cargill shall submit a written report which states that no deviations occurred. Each report shall be due within thirty days after the end of each semi-annual reporting period (January 1 through June 30, or July 1 through December 31, as applicable, except the first report where the reporting period is from the date of lodging of this Consent Decree through December 31, 2005). Reports shall be submitted as set forth in Paragraph 84 (Notice and Penalty Payment). Emissions data may be submitted in electronic format unless otherwise requested by the Appropriate Plaintiff-Intervenor.

37. Cargill shall retain records required by Paragraphs 15-30 of this Consent Decree for a period of five years unless other state or local regulations require the records to be maintained longer.

38. Cargill's semi-annual reports shall contain the following certification and may be signed by the company employees responsible for corn and oilseed processing environmental management and compliance:

"I certify under penalty of law that I have personally examined the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

D. PERMITTING

39. Within the schedules specified in Paragraphs 15-27 of the Consent Decree, Cargill shall apply for modification of its federally-enforceable construction and/or operating permits to incorporate the specific emission reduction requirements, emission limits, operating parameters, performance testing requirements, monitoring requirements and recordkeeping requirements specified under Paragraphs 15-27. It is the intent of the parties that the requirements under Paragraphs 15-27 and associated appendices survive termination of this Consent Decree and are deemed "applicable requirements" under Title V of the Clean Air Act and state and local operating permit programs that implement the requirements of Title V. EPA, states and local agencies agree to propose as permit conditions, and may propose as revisions to their SIPs, the specific emission limits, operating parameters, monitoring requirements and recordkeeping requirements set forth under Paragraphs 15-27 and associated appendices, and as proposed by Cargill under Paragraphs 15-27 so long as Cargill's proposal is consistent with Consent Decree emission reduction requirements. Cargill agrees not to contest any such permit conditions or SIP revisions. For emission reduction projects necessary to meet the requirements of Paragraphs 15-

28 and 30 of this Consent Decree, Cargill, as necessary, shall apply for modification of its federally-enforceable operating permits to incorporate revised emission limits for any collateral emissions increases resulting from implementation of such emission reduction projects within the schedules specified in Paragraphs 15-28 of the Consent Decree for permitting of such projects. For units and pollutants not addressed by the emission reduction programs under Paragraphs 15-27 of this Consent Decree, Cargill shall have a period of 3 years from the date of lodging of the Consent Decree to apply for a permit or permit amendment to impose or modify the VOC, HAP or CO emission limits for the sources included in Appendix A. Prior to issuance of revised construction and/or operating permits that incorporate Consent Decree requirements, Cargill shall operate all units identified in Paragraphs 15-28 of this Consent Decree and associated appendices in accordance with the provisions of Paragraphs 15-28 and 30 of this Consent Decree and associated appendices.

V. CIVIL PENALTY

40. Within thirty (30) calendar days of entry of this Consent Decree, Cargill shall pay to the United States and Plaintiff-Intervenors a total civil penalty pursuant to Section 113 of the Act, 42 U.S.C. § 7413 in the amount of \$1,600,000. The Plaintiffs agree that to the extent the emission reduction projects required in this Consent Decree result in emission reductions not otherwise required by law, they have been considered environmentally beneficial projects for civil penalty mitigation.

41. Of the total civil penalty, \$830,769 shall be paid to the United States by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number and DOJ Case Number, and

the civil action case name and case number. The costs of such EFT shall be Cargill's responsibility. Payment shall be made in accordance with instructions provided to Cargill by the Financial Litigation Unit of the U.S. Attorney's Office. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. Cargill shall provide notice of payment, referencing the USAO File Number and DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA, as provided in Paragraph 84 (Notice and Penalty Payment).

42. Of the total civil penalty, \$769,231 shall be divided among the state and local air authorities that have filed Complaints in Intervention and joined the claims alleged by the United States in this action. Cargill shall make payment as follows:

- a) \$61,538 to the State of Alabama;
- b) \$30,769 to the State of Georgia;
- c) \$30,769 to the State of Illinois;
- d) \$61,538 to the State of Indiana;
- e) \$123,082 to the State of Iowa;
- f) \$92,307 to Linn County, Iowa;
- g) \$30,769 to Polk County, Iowa;
- h) \$30,769 to the State of Missouri;
- i) \$61,538 to the State of Nebraska;
- j) \$61,538 to the State of North Carolina;
- k) \$61,538 to the State of North Dakota;
- l) \$30,769 to the State of Ohio;

m) \$30,769 to Montgomery County, Ohio; and

n) \$61,538 to the City of Memphis and Shelby County, Tennessee.

Payment shall be made as provided in Paragraph 84 (Notice and Penalty Payment).

43. Upon entry of this Consent Decree, this Consent Decree shall constitute an enforceable judgment for purposes of post-judgment collection in accordance with Rule 69 of the Federal Rules of Civil Procedure, the Federal Debt Collection Procedure Act, 28 U.S.C. § 3001-3308, and other applicable federal authority. The Plaintiff shall be deemed a judgment creditor for purposes of collection of any unpaid amounts of the civil and stipulated penalties and interest.

44. No amount of the total civil penalty of \$1,600,000 to be paid by Cargill shall be used to reduce its federal or state tax obligations.

45. Supplemental Environmental Projects. By no later than five years from entry of this Consent Decree, Cargill shall complete implementation of the Supplemental Environmental Projects (“SEPs”) identified in Appendix P (Supplemental Environmental Projects) (hereinafter, “Appendix P SEPs”) at an aggregate cost of at least \$3,000,000, in accordance with the requirements of Paragraphs 46-48.

46. Within one year from entry of this Consent Decree, Cargill shall provide Plaintiff and Plaintiff-Intervenors with a work plan that provides the proposed schedule for commencing and completing construction of the Appendix P SEPs. The work plan submitted under this paragraph is incorporated by reference herein and made directly enforceable under the Consent Decree.

47. Semi-annual reports, as required under Paragraph 36, shall include a description of work undertaken to implement the Appendix P SEPs and an accounting of all costs incurred in implementing the Appendix P SEPs. Cargill shall provide, upon request, copies of invoices, receipts, purchase orders or other documentation of costs incurred to implement the Appendix P SEPs.

48. Within five years from entry of this Consent Decree, Cargill shall provide an Appendix P SEP completion report to Plaintiffs that documents the dates each project was completed, results of implementing the project (including energy and emission reductions), and project dollars expended by Cargill in implementing the projects.

49. Community-Based Supplemental Environmental Projects. By no later than five years from entry of this Consent Decree, Cargill shall complete implementation of the Community-Based SEPs identified below at an aggregate cost of at least \$500,000:

- a. Mid-South Clean Air Coalition Diesel Retrofit program in Shelby County, TN;
- b. Eddyville Dunes and Wetland Restoration Project in Eddyville, IA;
- c. Cedar Rapids, IA Indian Creek Nature Center Wetlands Restoration Project;
- d. Nebraska-Missouri River Wetland Reserve Enhancement Program; and
- e. Such additional or alternative Community-Based SEPs as Cargill may propose, subject to Plaintiff's approval.

The implementation of the Community-Based SEPs shall be deemed complete upon Cargill's expenditure of at least \$500,000 in accordance with the work plan approved pursuant to Paragraph 50.

50. Within one year from entry of this Consent Decree, Cargill shall provide to Plaintiff and Plaintiff-Intervenors, for review and approval, a detailed work plan that provides the proposed schedule for commencing and completing the Community-Based SEPs identified above, as well as describing the nature, scope and goals of the projects, and where they are to be implemented. Cargill, subject to Plaintiff's approval, may propose an alternative or additional Community-Based SEP. Cargill's Community-Based SEP work plans shall be approved by the Plaintiff and Appropriate Plaintiff-Intervenors provided they conform to the requirements of EPA's Supplemental Environmental Projects Policy (eff. May 1, 1998).

51. Community-Based SEP Completion Report. For the Community-Based SEPs completed under this Section during a particular semiannual period, Cargill shall provide, as part of the semiannual report for that period, a Community-Based SEP Completion Report certified in accordance with Paragraph 38 of this Consent Decree and containing the following information:

- a. A detailed description of the Community-Based SEP as implemented;
- b. A description of any pre-report implementation problems encountered and the solutions thereto;
- c. An accounting of all costs incurred by Cargill for the purpose of implementing the Community-Based SEP. Cargill shall provide, upon request, copies of the invoices, receipts, purchase orders, or other documentation that specifically identifies and itemizes the individual cost

or the goods and/or services for which payment is being made. Canceled drafts do not constitute acceptable documentation unless such drafts specifically identify and itemize the individual costs of the goods and/or services for which payment is being made; and

- d. A certification that the Community-Based SEP has been satisfactorily completed which is signed by the company employees responsible for corn and oilseed processing environmental management and compliance.

52. Acceptance of Community-Based SEP Completion Report. After receipt of the Community-Based SEP Completion Report described in Paragraph 51 above, the Plaintiff and Appropriate Plaintiff-Intervenors will notify Cargill, in writing, regarding: (a) any deficiencies in the Community-Based SEP Completion Report along with a grant of an additional thirty (30) days for Cargill to correct any deficiencies; or (b) indicate that the Plaintiff and Appropriate Plaintiff-Intervenors conclude that the project has been completed satisfactorily; or (c) determine that the project has not been completed satisfactorily and seek stipulated penalties in accordance with Paragraph 57 herein.

53. If the Plaintiff and Appropriate Plaintiff-Intervenors elect to exercise option (a) above, i.e., if the Community-Based SEP Completion Report is determined to be deficient but Plaintiffs and Appropriate Plaintiff-Intervenors have not yet made a final determination about the adequacy of Community-Based SEP completion itself, Cargill shall have the opportunity to object in writing to the notification of deficiency given pursuant to this paragraph within ten (10) days of receipt of such notification. The Plaintiffs and Appropriate Plaintiff-Intervenors and Cargill shall have an additional thirty (30) days from the receipt of the Plaintiffs and Appropriate

Plaintiff-Intervenors notification of objection to reach agreement on changes necessary to the Community-Based SEP Completion Report. If agreement cannot be reached on any such issue within this thirty (30) day period, the Plaintiff and Appropriate Plaintiff-Intervenors shall provide a written statement of their decision on the adequacy of the completion of the Community-Based SEP to Cargill.

54. If for any reason Cargill expends less than the full amount in Paragraphs 45 (Appendix P SEPs) or 49 (Community-Based SEPs), Cargill shall pay the balance of the unexpended funds in accordance with the payment requirements set forth in Paragraph 41, within thirty (30) days of receipt of written notification of the unexpended funds from the United States.

55. In any public statement regarding the funding of Appendix P SEPs or Community-Based SEPs implemented under this Consent Decree, Cargill shall clearly indicate that these projects are being undertaken as part of the settlement of an enforcement action for alleged environmental violations. Cargill shall not be able to use or rely on any emissions reductions generated as a result of its performance of the Appendix P SEPs or Community-Based SEPs in any federal or state emission averaging, banking, trading or netting program.

56. These Paragraphs 45-55 shall not relieve Cargill of its obligation to comply with all applicable provisions of federal, state or local law during the implementation of the Appendix P SEPs or Community-Based SEPs, nor shall they be construed to be a ruling on, or determination of, any issue related to any federal, state or local permit, nor shall they be construed to constitute Plaintiffs approval of the equipment or technology installed by Cargill in connection with the Appendix P SEPs or Community-Based SEPs undertaken pursuant to this Consent Decree.

VI. STIPULATED PENALTIES

57. Cargill shall pay stipulated penalties in the amounts set forth below to the Plaintiff for violations of the Consent Decree. When a violation of the Consent Decree is at a specific facility, Cargill shall divide the stipulated penalty set forth below equally among the Plaintiff and the Appropriate Plaintiff-Intervenors for the following:

a. For failure to comply with a proposed emission limit under Paragraphs 15-29 (other than, for proposed emission limits under Paragraphs 23-26, startup, shutdown or malfunction events as defined in 40 C.F.R. Part 63), per day, per unit:

For one through three days per calendar month - \$1,500
For four through ten days per calendar month - \$2,500
For greater than 10 days per calendar month - \$5,000

b. For failure to monitor operating parameters for pollution control equipment established under Paragraphs 15-29, per day, per calendar quarter, per device not monitored:

For four to ten days per calendar quarter - \$1,500
For eleven through twenty days per calendar quarter - \$2,500
For greater than twenty days per calendar quarter - \$3,750

c. For failure to operate air pollution control devices within parameters as established under Paragraphs 15-29 (other than, for parameters as established under Paragraphs 23-26, startup, shutdown or malfunction events as defined in 40 C.F.R. Part 63), per day, per device:

For two to six days per calendar month - \$1,500
For seven through twelve days per calendar month - \$2,500
For greater than twelve days per calendar month - \$3,750

d. For failure to meet the 12-month rolling average solvent loss ratio limits established pursuant to Paragraphs 19-22:

For each exceedance of a 12-month rolling average - \$30,000

e. For failure to install CEMs on sources pursuant to Paragraphs 30(a)-(c) and Appendices B, C and D, per a CEM not timely installed:

For first full month of delay - \$2,500

For each subsequent month and fraction thereof - \$2,500

f. For failure to certify CEMs pursuant to Paragraphs 30(a)-(c) and Appendices B, C and D, per a CEM not certified:

For first full month of delay - \$2,500

For each subsequent month and fraction thereof - \$2,500

g. For failure to operate CEMs pursuant to Paragraphs 30(a)-(c) and Appendices B, C and D, per CEM not operated, \$100 per day.

h. For failure to apply for permits incorporating emission limits as required by Paragraphs 15-28, \$1,000 per the first full week of delay, and \$1,000 per each subsequent week of delay, or fraction thereof.

i. For failure to preserve records as specified in Paragraph 37 of the Consent Decree:

Per record not retained per day: \$500

j. For failure to conduct a compliance test as required by Paragraph 30, per day, per unit:

1 st through 30 th day after deadline	\$1,000
31 st through 60 th day after deadline	\$2,000
Beyond 60 th day	\$5,000

k. For failure to complete the CO emission reduction project required under Paragraph 17, \$1,000 per a day.

l. For failure to submit a semi-annual report required by Paragraph 36 of this Consent Decree, per day:

1 st through 30 th day after deadline	\$200
31 st through 60 th day after deadline	\$500
Beyond 60 th day	\$1,000

m. For failure to notify the Plaintiffs of Cargill's sale or transfer of a facility pursuant to Paragraph 2, \$250 per day.

n. For failure to pay the civil penalty as specified in Section V of this Consent Decree, Cargill shall pay an additional \$30,000 per week that full payment is delayed plus interest on the amount overdue at the rate specified in 31 U.S.C. § 3717.

o. For failure to satisfactorily complete implementation of the Appendix P SEPs or Community-Based SEPs as required under Paragraphs 45 and 49, Cargill shall pay the shortfall as provided in Paragraph 54 and pay a stipulated penalty of \$50,000, each.

p. For failure to submit each of the proposed work plans required by Paragraphs 46 and 50, or each of the completion reports required by Paragraphs 48 and 51 of the Consent Decree, per day:

1 st through 30 th day after deadline	\$1,000
31 st through 60 th day after deadline	\$2,000
Beyond 60 th day	\$3,000

q. For failure to escrow stipulated penalties as required by Paragraph 59, \$1,425 per day.

58. Cargill shall pay stipulated penalties upon written demand by the Plaintiff and the Plaintiff-Intervenors no later than thirty (30) days after Cargill receives such demand. Stipulated penalties shall be paid to the Plaintiff and the Plaintiff-Intervenors as provided in Paragraphs 57 and 84 (Notice and Penalty Payment) of this Consent Decree.

59. Should Cargill dispute its obligation to pay part or all of a stipulated penalty, it may avoid the imposition of the stipulated penalty for failure to pay a penalty due to the Plaintiff and the Plaintiff-Intervenors by placing the disputed amount demanded by the Plaintiff and the Plaintiff-Intervenors, not to exceed \$30,000 for any given event or related series of events at any one plant, in a commercial escrow account pending resolution of the matter and by invoking the Dispute Resolution provisions of Part IX within the time provided in Paragraph 58 for payment of stipulated penalties. If the dispute is thereafter resolved in Cargill's favor, the escrowed amount plus accrued interest shall be returned to Cargill. Otherwise the Plaintiff and Plaintiff-Intervenors shall be entitled to the escrowed amount that was determined to be due by the Court plus the interest that has accrued on such amount, with the balance, if any, returned to Cargill.

60. The Plaintiff and Plaintiff-Intervenors reserve the right to pursue any other remedies for violations of this Consent Decree to which they are entitled. The Plaintiff and Plaintiff-Intervenors will not seek stipulated penalties and civil or administrative penalties for the same violation of the Consent Decree.

VII. RIGHT OF ENTRY

61. Nothing in this Consent Decree shall limit the authority of EPA and Plaintiff-Intervenors to conduct tests and inspections under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable law.

VIII. FORCE MAJEURE

62. If any event occurs which causes or may cause a delay or impediment to performance in complying with any provision of this Consent Decree, Cargill shall notify the Plaintiff and Plaintiff-Intervenors in writing as soon as practicable, but in any event within twenty (20) business days of when Cargill first knew of the event or should have known of the event by the exercise of due diligence. In this notice Cargill shall specifically reference this Paragraph of this Consent Decree and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by Cargill to prevent or minimize the delay and the schedule by which those measures will be implemented. Cargill shall adopt all reasonable measures to avoid or minimize such delays.

63. Failure by Cargill to provide notice to the Plaintiff and Plaintiff-Intervenors of an event which causes or may cause a delay or impediment to performance shall render this Part VIII voidable by the Plaintiff and Plaintiff-Intervenors as to the specific event for which Cargill has failed to comply with such notice requirement, and, if voided, is of no effect as to the particular event involved.

64. The Plaintiff or the Plaintiff-Intervenors shall notify Cargill in writing regarding Cargill's claim of a delay or impediment to performance as soon as practicable, but in any event within thirty (30) days of receipt of the Force Majeure notice provided under Paragraph 62. If the Plaintiff or the Plaintiff-Intervenors agree that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Cargill, including any entity controlled by Cargill, and that Cargill could not have prevented the delay by the exercise of due diligence, the parties shall stipulate to an extension of the required deadline(s) for all

requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances. Cargill shall not be liable for stipulated penalties for the period of any such delay.

65. If the Plaintiff and the Plaintiff-Intervenors do not accept Cargill's claim that a delay or impediment to performance is caused by a force majeure event, to avoid payment of stipulated penalties, Cargill must submit the matter to this Court for resolution within twenty (20) business days after receiving notice of the Plaintiff's and the Plaintiff-Intervenors position, by filing a petition for determination with this Court. Once Cargill has submitted this matter to this Court, the Plaintiff and Plaintiff-Intervenors shall have twenty (20) business days to file their response to said petition. If Cargill submits the matter to this Court for resolution and the Court determines that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Cargill, including any entity controlled by Cargill, and that Cargill could not have prevented the delay by the exercise of due diligence, Cargill shall be excused as to that event(s) and delay (including stipulated penalties), for a period of time equivalent to the delay caused by such circumstances.

66. Cargill shall bear the burden of proving that any delay of any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond their control, including any entity controlled by it, and that Cargill could not have prevented the delay by the exercise of due diligence. Cargill shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but does not necessarily, result in an extension of a subsequent compliance date or dates.

67. Unanticipated or increased costs or expenses associated with the performance of Cargill's obligations under this Consent Decree shall not constitute circumstances beyond the control of Cargill, or serve as a basis for an extension of time under this Part. However, failure of a permitting authority to issue a necessary permit in a timely fashion is an event of Force Majeure where Cargill has taken all steps available to it to obtain the necessary permit including but not limited to:

- a. submitting a timely and complete permit application;
- b. responding to requests for additional information by the permitting authority in a timely fashion; and
- c. prosecuting appeals of any disputed terms and conditions imposed by the permitting authority in an expeditious fashion.

68. Notwithstanding any other provision of this Consent Decree, this Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of Cargill delivering a notice of Force Majeure or the parties' inability to reach agreement.

69. As part of the resolution of any matter submitted to this Court under this Part VIII, the parties by agreement, or this Court, by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the Plaintiff and the Plaintiff-Intervenors or approved by this Court. Cargill shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

IX. DISPUTE RESOLUTION

70. The dispute resolution procedure provided by this Part IX shall be available to resolve all disputes arising under this Consent Decree except as otherwise provided in Part VIII regarding Force Majeure.

71. The dispute resolution procedure required herein shall be invoked upon the giving of written notice by one of the parties to this Consent Decree to another advising of a dispute pursuant to this Part IX. The notice shall describe the nature of the dispute, and shall state the noticing party's position with regard to such dispute. The party receiving such a notice shall acknowledge receipt of the notice and the parties shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days from the receipt of such notice.

72. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between representatives of the Plaintiff, the Plaintiff-Intervenors with jurisdiction over the facility at which the dispute arose and Cargill, unless the parties' representatives agree to shorten or extend this period.

73. In the event that the parties are unable to reach agreement during such informal negotiation period, the Plaintiff and the participating Plaintiff-Intervenors shall provide Cargill with a written summary of their position regarding the dispute. In the event the Plaintiff and the participating Plaintiff-Intervenor disagree, the position of the Plaintiff shall control. The position advanced by the Plaintiff and the participating Plaintiff-Intervenors shall be considered binding unless, within forty-five (45) calendar days of Cargill's receipt of the written summary of the

Plaintiff and the participating Plaintiff-Intervenors position, Cargill files with this Court a petition which describes the nature of the dispute, and includes a statement of Cargill's position and any supporting data, analysis, and/or documentation relied on by Cargill. The Plaintiff and the participating Plaintiff-Intervenors shall respond to the petition within forty-five (45) calendar days of filing.

74. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Part IX may be shortened upon motion of one of the parties to the dispute.

75. Notwithstanding any other provision of this Consent Decree, in dispute resolution, this Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of invocation of this Part IX or the parties' inability to reach agreement. The final position of the Plaintiff and the participating Plaintiff-Intervenors shall be upheld by the Court if supported by substantial evidence in the record as identified and agreed to by all the Parties.

76. As part of the resolution of any dispute submitted to dispute resolution, the parties, by agreement, or this Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. Cargill shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule.

X. GENERAL PROVISIONS

77. Effect of Settlement.

a. This Consent Decree is not a permit; compliance with its terms does not guarantee compliance with any applicable federal, state or local laws or regulations.

During the effective period of the Consent Decree, Cargill shall comply with the specific emission reduction requirements, emission limits, operating parameters, monitoring requirements and recordkeeping requirements specified in this Consent Decree including those specified pursuant to Paragraph 19, which shall supercede and control over corresponding terms and conditions of any air quality control permits existing as of the date of entry of this Consent Decree.

b. In determining whether a future modification will result in a significant net emissions increase, Cargill shall not take credit for any emissions reductions required by this Consent Decree, as set forth in Paragraphs 15-27, for netting purposes as defined by the applicable regulations implementing Part C of Title I of the Clean Air Act. In addition, the emission reductions of PM, PM₁₀, NO_x, SO₂, CO and VOC (at units other than dryers) required under this Consent Decree, as set forth in Paragraphs 15-27, may not be used for any emissions offset, banking, selling or trading program. No further offsets are required for any emission units existing at the facilities in Appendix A as of the date of lodging of this Consent Decree. Cargill may continue to sell and trade: i) NO_x credits of 50 tons per year for the Memphis facility (an amount equal to the average credits available to Cargill in 2003 and 2004 and representative of Cargill's baseline operations); and ii) emission credits resulting from reductions in excess of those required

to meet the emission limits set forth in Appendices B-L. Cargill may not use VOC emission reductions up to 98 percent of the uncontrolled dryer emissions from sources in Appendices H, I and J for any emissions offset, banking, selling or trading program.

c. Nothing in this Consent Decree shall be construed to limit the ability of the State of Nebraska to ensure compliance with the National Ambient Air Quality Standards (NAAQS) and the PSD increment provisions of 40 C.F.R. Part 52.21(c) and the corresponding state regulations.

78. Resolution of Claims. Satisfaction of the requirements of this Consent Decree constitutes full settlement of and shall resolve all past civil and administrative liability of Cargill and all owners and prior owners and/or operators of the facilities listed in Appendix A to the Plaintiff and the Plaintiff-Intervenors for the violations alleged in the United States' and Plaintiff-Intervenors' Complaints (and any Notices of Violation referenced therein), and all civil and administrative liability of Cargill, and all owners and prior owners and/or operators of the facilities listed in Appendix A, for any violations at the facilities included in Appendix A arising out of facts and events that occurred or may have occurred during the relevant time period, or that arise out of execution of the provisions of this Consent Decree, under the following statutory and regulatory provisions:

a. PSD and Nonattainment New Source Review Requirements at Parts C and D of Subchapter I of the Act and the regulations promulgated thereunder at 40 C.F.R. Part 52.21 and 51.165, and the SIP provisions which incorporate and implement the above listed federal statute and regulations;

b. New Source Performance Standards under Section 111 of the Clean Air Act and the regulations promulgated thereunder at 40 C.F.R. Part 60, including Subparts D, Db, Dc, DD, Kb, GG, VV, and Y, and the SIP provisions which incorporate and implement the above listed federal statute and regulations;

c. Toxic Chemical Release Reporting Requirements pursuant to EPCRA Section 313, 42 U.S.C. § 11023;

d. CERCLA Notification and Reporting Requirements under EPCRA Section 304, 42 U.S.C. § 11004;

e. State Implementation Plan Requirements and State and Local Air Permitting Statutes and Regulations for: (1) permitting of the construction and operation of new and modified stationary sources; (2) requirements relating to emission limits in permits issued for such construction and operation; (3) performance testing and emissions monitoring; (4) data submission and notification requirements; (5) supplementation of permit applications; (6) hazardous air pollutants; (7) emission limits, control requirements, and standards of performance; (8) odor, noise or other nuisance; and (9) payment of fees based on quantity of emissions.

For purposes of this Consent Decree, the "relevant time period" shall mean the period beginning when the United States' claims and/or Plaintiff-Intervenor's claims under the above statutes and regulations accrued through the date of entry of this Consent Decree. During the effective period of the Consent Decree, the emission units subject to this Consent Decree shall be on a compliance schedule and any modification to these units, as defined in 40 C.F.R. Part 52.21, which is not required by this Consent Decree is

beyond the scope of this resolution of claims. Nothing in this Paragraph 78 shall be construed to limit the Plaintiff and Plaintiff-Intervenor's right to demand stipulated penalties in accordance with Paragraph 57. Paragraph 78 shall survive the termination of the Consent Decree.

79. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Cargill of its obligation to comply with all applicable federal, state and local laws and regulations. Nothing in this Consent Decree shall relieve Cargill of its obligation to comply with state and local laws, rules and regulations which become effective after the date of lodging of the consent decree or with State Implementation Plan provisions promulgated after the date of lodging of the Consent Decree. Subject to Paragraphs 60 and 78, nothing contained in this Consent Decree shall be construed to prevent or limit the United States' or the Plaintiff-Intervenor's rights to obtain penalties or injunctive relief under the Act or other federal, state or local statutes or regulations, including but not limited to, Section 303 of the Act, 42 U.S.C. § 7603.

80. Third Parties. Except as otherwise provided by this Consent Decree or by law, this Consent Decree does not limit, enlarge or affect the rights of any party to this Consent Decree as against any third parties. Nothing in this Consent Decree should be construed to create any rights, or grant any cause of action, to any person not a party to this Consent Decree.

81. Costs. Each party to this Consent Decree shall bear its own costs and attorneys' fees through the date of entry of this Consent Decree.

82. Public Documents. All information and documents submitted by Cargill to the Plaintiff and Plaintiff-Intervenors pursuant to this Consent Decree shall be subject to public

inspection, unless subject to legal privileges or protection or identified and supported as business confidential by Cargill in accordance with 40 C.F.R. Part 2.

83. Public Comments - Federal Approval. The parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the requirements of 28 C.F.R. Part 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and consideration of any comments. The United States reserves the right to withdraw or withhold consent if the comments regarding this Consent Decree disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper or inadequate. Cargill and the Plaintiff-Intervenors consent to the entry of this Consent Decree.

84. Notice and Penalty Payment. Unless otherwise provided herein, notifications to or communications with the United States, EPA, the Plaintiff-Intervenors or Cargill shall be deemed submitted on the date they are postmarked and sent either by overnight receipt mail service or by certified or registered mail, return receipt requested. Except as otherwise provided herein, when written notification to or communication with the United States, EPA, the Plaintiff-Intervenors or Cargill is required by the terms of this Consent Decree or when payment of a penalty is required by the terms of this Consent Decree, it shall be addressed or paid as set forth in Appendix Q:

85. Change of Notice Recipient. Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address.

86. Modification. Except as provided herein, there shall be no modification of this Consent Decree without written agreement of the parties. There shall be no material modification of this Consent Decree without the written agreement of the parties and by Order of the Court.

87. Continuing Jurisdiction. The Court retains jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, or modification. During the term of this Consent Decree, any party may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XI. TERMINATION

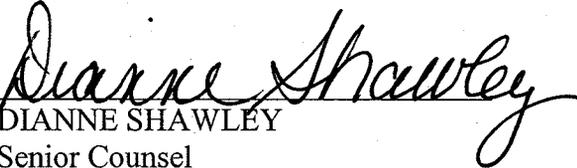
88. Prior to complete termination of the requirements of this Consent Decree, any party may, upon motion to the Court, seek to terminate specific provisions of this Consent Decree. This Consent Decree shall be subject to complete termination upon motion by any party after Cargill satisfies all requirements of this Consent Decree. At such time, if Cargill believes that it is in compliance with the requirements of this Consent Decree, and has paid the civil penalty and any stipulated penalties required by this Consent Decree, then Cargill shall so certify to the Plaintiff and the appropriate Plaintiff-Intervenors, and unless the Plaintiff and the appropriate Plaintiff-Intervenors object in writing with specific reasons within sixty (60) days of receipt of the certification, the Court shall order that this Consent Decree be terminated on Cargill's motion. If the Plaintiff or Plaintiff-Intervenors object to Cargill's certification, then the matter shall be submitted to the Court for resolution under Part IX ("Dispute Resolution") of this Consent Decree. Paragraphs 39 and 78 shall survive the termination of the Consent Decree.

So entered in accordance with the foregoing this _____ day of _____, 2005.

United States District Court Judge
District of Minnesota

FOR PLAINTIFF, THE UNITED STATES OF AMERICA:


KELLY A. JOHNSON
Acting Assistant Attorney General
Environment and Natural Resources
Division
U.S. Department of Justice


DIANNE SHAWLEY
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600 U.S. Courthouse
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By: _____
FRED SIEKERT
Assistant United States Attorney
District of Minnesota

United States et al. v. Cargill, Inc.

For Headquarters US EPA


THOMAS V. SKINNER *ju* DATE 8/10/05
Acting Assistant Administrator
Office of Enforcement and Compliance Assurance
1200 Pennsylvania Ave, N.W.
Washington, D.C. 20460

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:



Date 7-27-05

Bharat Mathur
Acting Regional Administrator
U.S. Environmental Protection
Agency, Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

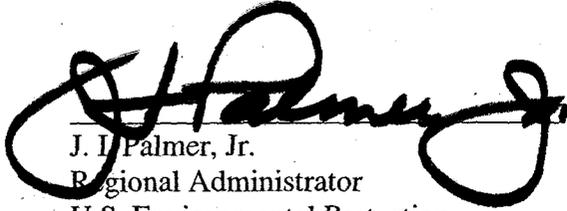
FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:



Date 07-22-05

Richard E. Greene
Regional Administrator
U.S. Environmental Protection
Agency, Region VI
1445 Ross Avenue, Suite 1200
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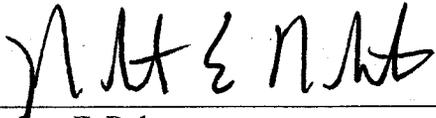
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J. I. Palmer, Jr.
Regional Administrator
U.S. Environmental Protection
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Sam Nunn Atlanta Federal Center
61 Forsyth Street SW
Atlanta, Georgia 30303-3104

Date AUG - 1 2005

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

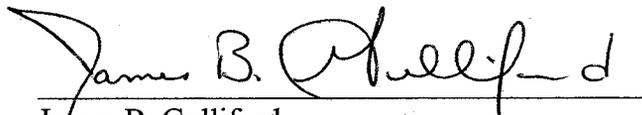


Date: JUL 21 2005

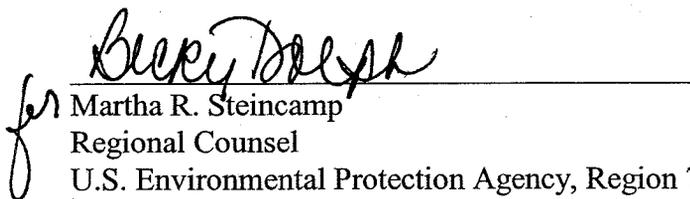
Robert E. Roberts
Regional Administrator
US EPA Region 8
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Denver, CO 80202-2466

United States et al v. Cargill, Incorporated

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:



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for

Martha R. Steincamp
Regional Counsel
U.S. Environmental Protection Agency, Region 7
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FOR THE PLAINTIFF-INTERVENOR, THE STATE OF ALABAMA

Ronald W. Gore

Date 8-1-05

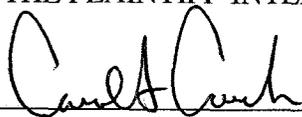
Name

Title

Address

CHIEF, AIR DIVISION
ALA. DEPT. OF ENV. MGMT.
MONTGOMERY, AL.

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF GEORGIA



Name
Title
Address

Date Aug 1, 2005

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF ILLINOIS

FOR THE STATE OF ILLINOIS
PEOPLE OF THE STATE OF ILLINOIS *ex rel.*

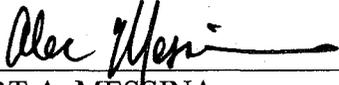
LISA MADIGAN,
Attorney General of the State of Illinois

MATTHEW J. DUNN, Chief
Environmental Enforcement/Asbestos Litigation Division

BY: 
THOMAS DAVIS, Chief
Environmental Bureau
Assistant Attorney General

DATE: 8/08/05

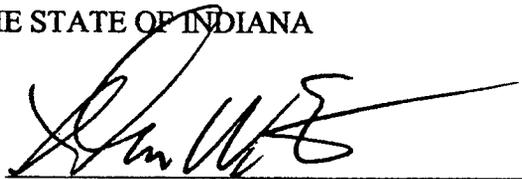
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BY: 
ROBERT A. MESSINA
Chief Legal Counsel

DATE: 8/16/05

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF INDIANA

Date: JULY 29, 2005

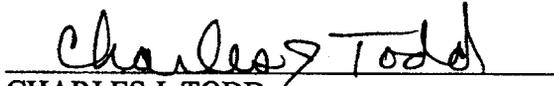


THOMAS W. EASTERLY
Commissioner
Indiana Department of Environmental Management

Approved as to form and legality:

STEVE CARTER
Indiana Attorney General

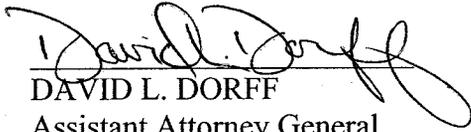
Date: August 5, 2005



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FOR THE PLAINTIFF-INTERVENOR,
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THOMAS J. MILLER
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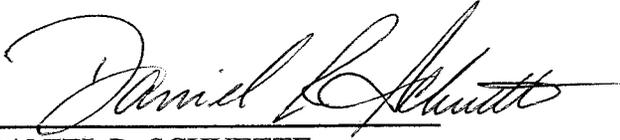


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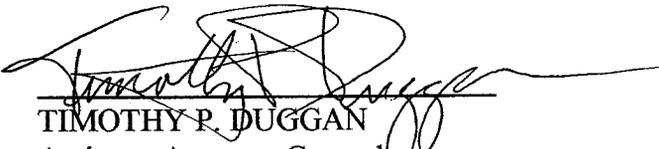
Date 7/27/05

FOR PLAINTIFF-INTERVERNOR, THE STATE OF MISSOURI



Date: 8/1/05

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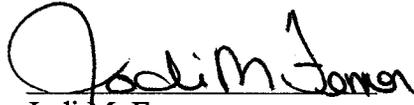


Date: 7/29/05

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Attorney General

By: 
Jodi M. Fenner
Assistant Attorney General
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Lincoln, NE 68509-8920
(402) 471-2682

Date: 

Signature page: USA et al v. Cargill, Incorporated, U.S. District Court, District of
Minnesota

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF NORTH CAROLINA



B. Keith Overcash, P.E.
Director, Division of Air Quality
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Raleigh, North Carolina 27699-1641

Date 8/2/05

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF OHIO

JIM PETRO
ATTORNEY GENERAL OF OHIO



MARGARET A. MALONE
Assistant Attorney General
Environmental Enforcement Section
30 East Broad Street, 25th Floor
Columbus, Ohio 42315-3400

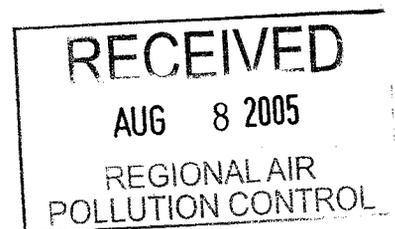
Date: 8/8/05

FOR THE COMBINED HEALTH DISTRICT OF MONTGOMERY COUNTY, OHIO
REGIONAL AIR POLLUTION CONTROL AGENCY



JOHN A. PAUL, RAPCA Supervisor
Duly Authorized Agent for the Health Commissioner
RAPCA
117 South Main Street
Dayton, Ohio 45422

Date: 8/8/05



FOR THE PLAINTIFF-INTERVENOR, THE TENNESSEE COUNTY OF SHELBY AND
CITY OF MEMPHIS



YVONNE S. MADLOCK

Director

Memphis and Shelby County Health Department

814 Jefferson Avenue

Memphis, Tennessee 38105

Date 8/6/05

FOR THE PLAINTIFF-INTERVENOR, THE STATE OF NORTH DAKOTA



Date

7-25-05

Terry L. Dwelle, MD, MPHTM
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State of North Dakota
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Bismarck, ND 58505-0200
Telephone 701.328.2372
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United States, et al. v. Cargill Incorporated

For the County of Linn, Iowa:

JEFFREY L. CLARK
Assistant Linn County Attorney



Jeffrey L. Clark
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Assistant Linn County Attorney
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7/22/05
Date

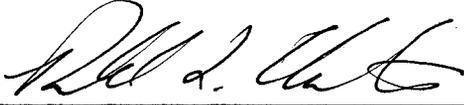
FOR THE IOWA COUNTY OF POLK

Date: 7/25/05



Michael B. O'Meara PK0013710
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FOR DEFENDANT, CARGILL, INCORPORATED



Date Aug 02, 2005

Ronald L. Christenson
Corporate Vice President, Chief Technology Officer
Cargill, Incorporated
15615 McGinty Road West
Wayzata, Minnesota 55391-2398

List of Appendices

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Appendix B—Boiler SO₂ Emission Control Plan

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Appendix A

List of Cargill Corn and Oilseed Processing Facilities Subject to the Consent Decree

**Appendix A- List of Cargill Corn and
Oilseed Processing Facilities Subject to the Consent Decree**

I. Corn Processing Facilities

Facility	Address
Blair, Nebraska (note 1)	650 Industrial Road Blair, NE 68008
Cedar Rapids, Iowa	1710 16 th Street S.E. Cedar Rapids, IA 52401
Dayton, Ohio	3201 Needmore Road Dayton, OH 45414-4321
Decatur, Alabama	1030 State Docks Road Decatur, AL 35601-7538
Dimmitt, Texas (note 2)	700 East Jones Street Dimmitt, TX 79027
Eddyville, Iowa	1 Cargill Drive Eddyville, IA 52553-5000
Hammond, Indiana	1100 Indianapolis Blvd. Hammond, IN 46320
Memphis, Tennessee	2330 Buoy Street Memphis, TN 38113-1502
Wahpeton, North Dakota	18049 County Road 8E Wahpeton, ND 58075

(1) The Blair, NE facility includes all sources and operations that have been permitted as part of the wet corn mill facility (including the ethanol facility). Facilities at Blair, NE that are now, or were in the past, joint ventures with Cargill are not subject to the Consent Decree.

(2) Cargill shall notify the Plaintiff and Appropriate Plaintiff-Intervenor of the re-start of the Dimmitt, TX facility in the first semi-annual report filed pursuant to Paragraph 36 after the re-start of the facility.

II. Oilseed Processing Facilities

Facility	Address
Cedar Rapids East, Iowa	411 6 th Street Northeast East Cedar Rapids, IA 52402
Des Moines, Iowa	3030 East Granger Avenue Des Moines, IA 50306
Fayetteville, North Carolina	1754 River Road Fayetteville, NC 28301
Gainesville, Georgia	862 West Ridge Road Gainesville, GA 30501

Guntersville, Alabama	2930 Guntersville Park Drive Guntersville, AL 35976
Iowa Falls, Iowa	602 Industrial Road Iowa Falls, IA 50126
Kansas City, Missouri	2334 Rochester Avenue Kansas City, MO 64120
Raleigh, North Carolina	1400 South Blount Street Raleigh, NC 27603-2506
Sidney, Ohio	2400 Industrial Drive Sidney, OH 45365
Sioux City, Iowa	11 th & Clark Streets Sioux City, IA 51101
Wichita, Kansas	1425 North Mosley Wichita, KS 67314
West Fargo, North Dakota	250 7 th Avenue NE West Fargo, ND 58078
Cedar Rapids West, Iowa	1110 12th Avenue SW Cedar Rapids IA 52404
Lafayette, Indiana	1503 Wabash Avenue Lafayette, IN 47905
Bloomington, Illinois	115 South Euclid Bloomington, IL 61702

Appendix B

Boiler SO₂ Emission Control Plan

Appendix B - Cargill Boiler SO2 Emission Control Plan

Facility	Emission Unit Description and Number	Heat Input MMBTU	Monitoring
Cedar Rapids	PC Boiler - 72-CB (2)	240.5	CEMS - 12 month rolling sum
Dayton	PC Boiler - B004	567	CEMS - 12 month rolling sum
Decatur	Stoker Boiler - S407 (2)	179.74	CEMS - 12 month rolling sum
Eddyville	Stoker Boiler - 1.001	282.1	CEMS - 12 month rolling sum
Eddyville	Stoker Boiler - 1.002	282.1	CEMS - 12 month rolling sum
Eddyville	Stoker Boiler - 1.003	282.1	CEMS - 12 month rolling sum
Fayetteville	Stoker Boiler - ES22	129	CEMS - 12 month rolling sum
Gainesville	Stoker Boiler - B001	145	CEMS - 12 month rolling sum
Hammond (1)	Blr No.6-Gas Tube & Tile - 1003U	200	N/A
Hammond (1)	Blr No.7-Gas Tube & Tile - 1004U	120	Retire
Hammond (1)	Blr No.8-Gas Tube & Tile - 1005U	120	N/A
Hammond (1)	Blr No.10-Gas Tube & Tile - 1006U	120	N/A
Memphis	Stoker Boiler - 8001	247	CEMS - 12 month rolling sum
Memphis	PC Boiler - 8301 (2)	247	CEMS - 12 month rolling sum
Sidney	Stoker Boiler - B001	54.34 (derated to 35.02)	CEMS - 12 month rolling sum
Sidney	Stoker Boiler - B002	54.34 (derated to 26.4)	CEMS - 12 month rolling sum

Comments:

CEMS monitoring shall be in accordance with 40 C.F.R. Part 60 and compliance with 40 C.F.R. Part 60 shall be deemed compliance with this Consent Decree.

Coal analysis will be conducted using at least one composite sample a month.

Notes:

- (1) The Hammond boilers No. 6 fuel oil capability is being eliminated as part of the Boiler SO2 Emission Control Plan
- (2) Cargill shall demonstrate that the individual facility permit limits comply with the combined SO2 capacity weighted average of 1.2 lb/MMBtu for the Cedar Rapids (PC Boiler - 72-CB), Memphis (PC Boiler - 8301) and Decatur (Stoker Boiler - S407) coal boilers pursuant to paragraph 16 of this Consent Decree using the following compliance demonstration formula:

$$X * (240.5/667.5) + Y * (180/667.5) + Z * (247/667.5) < \text{or} = 1.2 \text{ lb/MMBtu}$$

CR heat input capacity = 240.5 lb/ MMBtu
 DE heat input capacity = 180 lb/ MMBtu
 ME PC heat input capacity = 247 lb/ MMBtu
 Total CR, DE, ME PC heat input capacity = 667.5 lb/ MMBtu
 X = CR SO2 lb/MMBtu emission rate under new SO2 limit
 Y = DE SO2 lb/MMBtu emission rate under new SO2 limit
 Z = ME PC SO2 lb/MMBtu emission rate under new SO2 limit

Appendix C

Boiler CO Emission Control Plan

Appendix C—Boiler CO Emission Control Plan

Cargill proposes installation of a staged combustion over fire air system as a CO emissions reduction and combustion optimization project for the Eddyville coal boilers (EU 1.001, 1.002 and 1.039). The project involves adding to the existing overfire air turbulence system including: (1) replacement of the existing overfire air fan with a new higher capacity fan; (2) addition of overfire air nozzles to each of the front and rear boiler walls; and (3) replacement of the headers and nozzles with a higher capacity design. The project also involves engineering and installation of equipment to modify the existing undergrate flue gas recirculation system to promote even distribution of the flue gas across the width of the existing undergrate air ductwork. Cargill also will engineer and install equipment for injecting flue gas above the grate surface. In addition, Cargill will undertake and complete additional boiler efficiency work that may include superheater and economizer repairs or replacement. The project is estimated to cost approximately \$8 million. The boilers are currently subject to BACT limits of 1100 lbs of CO per hour per boiler or 3.899 lbs CO/MMBtu heat input. Annual allowable CO emissions are presently 14,454 tons per year. Detroit Stoker Company has provided a guarantee that 12-month rolling average CO emissions from these units will be capable of meeting the proposed limit of 4,374 tons per year based on a 12-month rolling sum based on a flue gas outlet of O₂ of 4% wet basis burning powder river basin coal. CO emissions from these units will be measured by a continuous emissions monitor.

Appendix D

Boiler NO_x Emission Control Plan

Appendix D - Cargill Boiler NOx Emission Control Plan

Facility	Emission Unit Description and Number	Heat Input MMBTU	Control Plan	Emission Limitations	Monitoring	Schedule (Years) from entry of Consent Decree
Blair	Package Boiler - 20A	198	LNB, FGR	0.07 lb/mmbtu - 30 day rolling average	CEMS	10
Blair	Package Boiler - 20B	198	LNB, FGR	0.07 lb/mmbtu - 30 day rolling average	CEMS	10
Blair	Package Boiler - 20C	198	LNB, FGR	0.07 lb/mmbtu - 30 day rolling average	CEMS	10
Blair	Package Boiler - 21	276.67	LNB, FGR	0.05 lb/mmbtu - 30 day rolling average	CEMS	10
Cedar Rapids	PC Boiler - 72-CB	240.5	LNB/OFA	369 ton per 12-month rolling sum	CEMS	10
Cedar Rapids	Package Boiler - 101	275	LNB, FGR	0.06 lb/mmbtu - 30 day rolling average	CEMS	10
Dayton	PC Boiler - B004		LNB, OFA, COMPLY w/NOX SIP PLAN	0.45 lb/mmbtu - 30 day rolling average, 745 ton per 12-month rolling sum	CEMS	10
Dayton	Package Boiler - B005	567	RETIRE		CEMS	5
Dayton	Package Boiler - B006	169.6	RETIRE		N/A	(Note 1)
Decatur	Stoker Boiler - S407	318.5	LNB, FGR, REMOVE CURRENT FUEL LIMIT	0.06 lb/mmbtu (NOTE 1) - 30 day rolling average	CEMS	5
Decatur	Package Boiler - S411	179.74	GOOD COMBUSTION	0.57 lb/mmbtu - 30 day rolling average	CEMS	10
Decatur	Package Boiler - S412	97.6	BACK UP OPERATION	1800 hrs/12 month rolling period	Recordkeeping	10
Dimmitt	Package Boiler - S406	122.1	BACK UP OPERATION	1800 hrs/12 month rolling period	Recordkeeping	10
Dimmitt	Package Boiler - S407	98.5	LNB	0.08 lb/mmbtu	Ref. Method Testing	10
Eddyville	Stoker Boiler - 1001	135.6	LNB	0.14 lb/mmbtu	Ref. Method Testing	10
Eddyville	Stoker Boiler - 1002	282.1	FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	Ref. Method Testing	10
Eddyville	Stoker Boiler - 1003	282.1	FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	CEMS	10
Eddyville	Package Boiler - 51	230	FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	CEMS	10
Eddyville	Package Boiler - 84	182.1	FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	CEMS	10
Eddyville	Package Boiler - 86	182.1	LNB, FGR, COMBINED LIMIT	212.1 lb/hr - 30 day rolling average (NOTE 2)	CEMS	10
Gaylesville	Stoker Boiler - ES22	129	GOOD COMBUSTION	0.7 lb/mmbtu	CEMS	10
Gainesville	Stoker Boiler - B001	145	GOOD COMBUSTION	0.41 lb/mmbtu	Ref. Method Testing	10
Hammond	Package Boiler - 1001U	96	RETIRE		Ref. Method Testing	10
Hammond	Package Boiler - 1002U	160	LNB, FGR, COMBINED LIMIT	0.06 lb/mmbtu	N/A	10
Hammond	Gas Tube & Tile - 1003U	200	COMBINED LIMIT	0.28 lb/mmbtu	Ref. Method Testing/Recordkeeping	10
Hammond	Gas Tube & Tile - 1004U	120	RETIRE		Ref. Method Testing/Recordkeeping	10
Hammond	Gas Tube & Tile - 1005U	120	BACK UP OPERATION, COMBINED LIMIT	1800 hrs/12 month rolling period	N/A	10
Hammond	Gas Tube & Tile - 1006U	120	BACK UP OPERATION, COMBINED LIMIT	1800 hrs/12 month rolling period	Recordkeeping	10
Memphis	Stoker Boiler - 8001	247	TBD		Recordkeeping	10
Memphis	PC Boiler - 8301	247	TBD		Recordkeeping	10
Memphis	Package Boiler - 8500	312	TBD		CEMS	3 (NOTE 4)
St. Louis	Package Boiler - 23	184.3	LNB, FGR	12 month rolling sum (NOTE 3)	CEMS	3 (NOTE 4)
St. Louis City	Package Boiler - 17	97	BACK UP OPERATION	0.06 lb/mmbtu - 30 day rolling sum	CEMS	3 (NOTE 4)
				Only operational when Boiler - 23 is not operating	Recordkeeping	10

Comments:

To permit the installation of boiler NOx control, Cargill may bring on site and use temporary boilers, provided boilers are gas fired and fired for no longer than 30 days per an installation.

CEMS monitoring shall be in accordance with 40 CFR Part 60 and compliance with 40 CFR Part 60 shall be deemed compliance with this Consent Decree.

Notes:

- To implement the retiring of B005 and the acceptance of 0.06 lb/mmbtu on B006, the natural gas fuel usage limits on B006 will be removed from Ohio Permit to Install No. 08-4215. Cargill will comply with the 0.06 lb/mmbtu emission limitation when using natural gas or fuel oil. Within twenty-four months of the date of logging of this consent decree, Cargill will submit an Ohio permit to install application to RAPPCA for the retirement of B005 and the removal of the natural gas usage restrictions for B006.
- Total NOx from Stoker Boilers 1.001, 1.002, 1.039 and package boilers 84 and 86 is limited to 212.1 lb/hr, 30 day rolling average.
- To implement the NOx cap, coal volume limits and ash limits on 8001 and 8301 are removed.
- All controls required to meet the total NOx allowable shall be installed by the end of the third year from entry of the Consent Decree. Compliance with the 12-month rolling sum shall be demonstrated beginning 12 months after the third year from entry of the Consent Decree.

Appendix E

Extraction VOC Emission Control Plan—Soybean Processing Plants

Appendix E—Extraction VOC Emission Control Plan—Soybean Processing Plants

Facility	Design Capacity TPY
Cedar Rapids East, Iowa	1,007,400
Des Moines, Iowa	766,500
Fayetteville, North Carolina	1,095,372
Gainesville, Georgia	990,000
Guntersville, Alabama	1,042,440
Iowa Falls, Iowa	1,040,250
Kansas City, Missouri	993,000
Raleigh, North Carolina	930,750
Sidney, Ohio	945,000
Sioux City, Iowa	1,642,500
Wichita, Kansas	777,000

Total Solvent Loss Capacity Weighted Average:

Cargill shall demonstrate compliance with the Total Solvent Loss Capacity Weighted Average using the following compliance demonstration formula:

$$\text{Conventional Soybean} = \frac{\sum(\text{Seed}_i * \text{SLR}_i)}{\sum(\text{Seed}_i)} \leq 0.175 \text{ gal/ton}$$

Where: Seed_i = Design capacity of oilseed plant i; and
SLR_i = Final SLR Limit for oilseed plant i.

Appendix F

Extraction VOC Emission Control Plan—Corn Germ and Sunflower Processing Plants

Appendix F—Extraction VOC Emission Control Plan—Corn Germ and Sunflower Processing Plants

Facility	Design Capacity TPY
West Fargo, North Dakota	735,840
Eddyville, Iowa	547,500
Memphis, Tennessee	547,500
Blair, Nebraska	438,000

Total Solvent Loss Capacity Weighted Average:

Cargill shall demonstrate compliance with the Total Solvent Loss Capacity Weighted Average using the following compliance demonstration formula:

$$\text{Corn Germ / Sunflower} = \frac{\sum(\text{Seed}_i * \text{SLR}_i)}{\sum(\text{Seed}_i)} \leq 0.30 \text{ gal/ton}$$

Where: Seed_i = Design capacity of oilseed plant i; and
 SLR_i = Final SLR Limit for oilseed plant i.

Appendix G

Extraction VOC Emission Control Plan – Specialty Plants

Appendix G

Extraction VOC Emission Control Plan – Specialty Plants

Location	Specialty Solvent Loss Factor	Conventional Solvent Loss Factor
Lafayette, Indiana	1.0 gal/ton	0.175 gal/ton
Cedar Rapids West, Iowa	0.9 gal/ton	0.175 gal/ton
Bloomington, Illinois	0.9 gal/ton	0.175 gal/ton

Compliance Demonstration Calculation

$$\text{Compliance Ratio} = \frac{\text{Actual Solvent Loss}}{\sum_{i=1}^n ((\text{Oilseed})_i * (\text{SLF})_i)}$$

Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months

Oilseed = Tons of each oilseed type “i” (Specialty and Conventional) processed during the previous 12 operating months

SLF = The corresponding solvent loss ratio limit (gal/ton) for oilseed “i” listed in Table

Compliance is to be determined on a location specific basis.

If the compliance ratio is less than or equal to 1, the source was in compliance.

Appendix H

Corn Processing VOC Emission Control Plan

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Appendix H - Corn Processing VOC Emission Control Plan

Facility	Emission Unit Description and Number	Control Device Description	Emission Limit	Parameters Monitored	Compliance Operating Range	Parameter Monitoring Frequency	Schedule/years from Issuance of Consent Decree
Blair	Carbon Furnace - Fructose - (E6)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Blair	Gluten Flash Drying - (E)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Blair	Steephouse Scrubber (S)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3
Cedar Rapids	Carbon Furnace - Corn Syrup - (EU02)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Cedar Rapids	Feed Drying - Rotary - (EU-72-FD)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Feed Drying - STD - (EU-72-FD)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Germ Drying - Fluid Bed - (EU-113)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Germ Drying - Fluid Bed - (EU-20)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Gluten Drying - STD - (EU-20)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Gluten Drying - STD - (EU-20)	Thermal oxidizer	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Steephouse Scrubber (EU-41)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3
Dayton	Carbon Furnace - Corn Syrup - (P067)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Dayton	Carbon Furnace - Fructose - (P682)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Dayton	Gluten Drying - Flash - (P057)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P031)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P052)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P088)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Gluten Drying - Flash - (P072)	Thermal oxidizer	95% control (3)	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Carbon Furnace	Zero hearth furnace or thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Carbon Furnace	Zero hearth furnace or thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Feed Drying - Rotary	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dimmitt	Carbon Furnace - (S-304)	Zero hearth furnace or thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Eddyville	Carbon Furnace - (97.000)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Eddyville	Carbon Furnace - (58.000)	Zero hearth furnace	95% control or <= 10 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Eddyville	Millhouse Scrubber (9.000)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3
Eddyville	Millhouse Scrubber (102.000)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3
Eddyville	Millhouse Scrubber (119.000)	Scrubber	95% control or <= 20 ppm or alternative limit (1)	scrubbing flow rate, pH & pressure drop	TBD (scrubbing flow rate - 3 hour average; pH & pressure drop - once per day)	Scrubbing flow rate - continuously; pH and pressure drop - once per day	3

Appendix H - Corn Processing VOC Emission Control Plan

Facility	Emission Unit Description and Number	Control Device Description	Emission Limit	Parameters Monitored	Compliance Operating Range	Parameter Monitoring Frequency	Schedule Years from Logging of Consent Decree
Hammond	Carbon Furnace - (104-01-R)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3 (2)
Hammond	Feed Drying - Rotary - (124-01-G)	Thermal oxidizer	TBD (Note 4)	Operating Temperature	TBD (3 hour average)	Continuously	5 (2)
Hammond	Germ Drying - Rotary - (21A-02-G)	Thermal oxidizer	TBD (Note 4)	Operating Temperature	TBD (3 hour average)	Continuously	5 (2)
Hammond	Germ Drying - Rotary - (51A-02-G)	Thermal oxidizer	TBD (Note 4)	Operating Temperature	TBD (3 hour average)	Continuously	5 (2)
Memphis	Carbon Furnace - Corn Syrup - (6008)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Carbon Furnace - Fructose - (9002)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Carbon Furnace - Fructose - (9008)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Gluten Drying - Flash - (4008B)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Gluten Drying - Flash - (4011)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Germ Drying - STD - (4011)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Germ Drying - STD - (4011)	Thermal oxidizer	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Wahpeton	Carbon Furnace - Fructose - (REF41)	Zero hearth furnace	95% control or <= 10ppm	Operating Temperature	TBD (3 hour average)	Continuously	3

Comments:

In addition, for unit(s) controlled by RTOs not designed for on-line regeneration (i.e., bake-out) and that are not preceded by a WESP or equivalent device(s), the emission limitations do not apply to periods of off-line RTO regeneration not to exceed 50 unit operating hours per calendar year and individual off-line RTO regeneration periods not to exceed 12 unit operating hours. For RTOs servicing more than one unit, a unit operating hour is any hour in which one or more of the unit is on line. Off-line RTO regeneration while all associated units are shut down is not included in these operating limitations. Also, off-line RTO regeneration periods that can be completed during unrelated shutdown, or malfunction periods (i.e., periods not related to the need to perform an off-line RTO regeneration) are not included in these limitations (i.e., Cargill may perform preventative off-line RTO regenerations during periods when the RTO is off-line for other reasons such as when the RTO is off-line due to maintenance or malfunction of upstream PM control equipment which requires bypass of the RTO). Cargill may petition EPA and the appropriate state or local regulatory agency to adjust these operating limitations for a specific RTO. With respect to the Dayton, OH facility, all on-line regeneration (or bake-out) shall be conducted in accordance with CAC Rules 3745-15-06(A)(3) and 3745-15-06(B).

All To Be Determined (TBD) values will be established through stack testing pursuant to Appendices M and O.

Notes:

- To the extent that the VOC performance test for this source demonstrates emissions above the 20 ppm and 95 percent VOC destruction efficiency emission limit noted above, within 90 days from the date of the performance test, Cargill shall submit a Supplemental VOC Emission Control Plan to the Plaintiff and the Appropriate Plaintiff-Intervenor that will establish a schedule to be completed within five years of lodging of this Consent Decree to demonstrate VOC emission reductions at the facility that are equivalent to or greater than the ton per year reduction necessary for the tested source to meet the lesser of either the 95 percent destruction or 20 ppm standard. Such reductions may be derived from either: (1) sources existing at the facilities as of the date of lodging of this Consent Decree and not subject to additional VOC control under this Appendix to the Consent Decree based on 2003 baseline VOC emissions (as adjusted, if necessary, to reflect changes to test methodology); or (2) for sources at the facility that are subject to VOC control under this Appendix to the Consent Decree, VOC emissions reductions in excess of the emission limits established for such sources. Such supplemental emission reductions will become an enforceable part of this Consent Decree upon approval by the Plaintiff and Appropriate Plaintiff-Intervenor.
- Within five years from the date of lodging of this Consent Decree, Cargill shall submit the emission limits established pursuant to Paragraph 23 and this Appendix as an amendment to the Hammond, Indiana facility's RACT plan; IDEM shall incorporate the emission limits into the RACT plan.
- Cargill shall demonstrate compliance with 98% control by complying with the Dayton, Ohio Corn Processing Ozone Cap in Appendix J.
- The overall control efficiency requirement for this unit shall be established through performance testing approved by IDEM and conducted in accordance with Appendix M. IDEM will establish the overall control efficiency requirement based on the level of efficiency demonstrated during this testing. The final control efficiency requirement will be established pursuant to Paragraph 34.

Appendix I

Integrated Feed/Bran Drying System VOC Emission Control Plan

Appendix I - Integrated Feed/Bran Drying Systems VOC Emission Control Plan

Facility	Emission Unit Description and Number	Control Device Description	Parameters Monitored	Parameter Monitoring Frequency	Emission Unit Description and Number	Control Device Description	Parameters Monitored (5)	Parameter Monitoring Frequency	Emission Limit
Dayton	Feed Dyer - STD - (P032)	Thermal Oxidizer	Temp = 1500 F (2)	Continuously	Bran Dyer - Rotary - (P040) Bran Dyer - Rotary - (P058) Bran Dyer - Rotary - (P037)	Scrubbers	Pressure Drop > 6 inwc (3) (8) pH > 8 (3) (8) Scrubbant Flow Rate > 850 gpm/600 gpm (2,4)	Continuously Continuously	TBD (6)
	Feed Dyer - STD - (P033)								
	Feed Dyer - STD - (P034)								
Memphis	Feed Dyer - STD - (4003)	Thermal Oxidizer	Temp = 1500 F (2)	Continuously	Bran Dyer - Rotary - (4003) Bran Dyer - Rotary - (4003)	Scrubbers	Pressure Drop > 6 inwc (3) pH > 8 (3) Scrubbant Flow Rate > 2000 gpm (2,3)	Once Each Day Once Each Day Continuously	TBD (1)
	Feed Dyer - STD - (4003)								
	Feed Dyer - STD - (4003)								
Hammond	Feed Dyer - Rotary - (89-03-G)	Thermal Oxidizer	Temp = TBD (2, 7)	Continuously	Bran Dyer - Flash - (89-01-G)	Scrubber	Pressure Drop > 6 inwc pH > 8 Scrubbant Flow Rate > 400 gpm (2)	Once Each Day Once Each Day Continuously	TBD (1)
	Feed Dyer - Rotary - (89-03-G)								
Warbaton	Feed Dyer - Rotary Bran Pre-dryer Germ Dyer	Thermal Oxidizer	Temp = 1350 F (2)	Continuously	Gluten Flash Dyer	Scrubber	Pressure Drop > 4 inwc pH > 3 Scrubbant Flow Rate > 100 gpm (2)	Once Each Day Once Each Day Continuously	TBD (1)

Comments:

Thermal oxidizers at Dayton and Memphis facilities will be designed to meet a residence time of at least one second and a combustion temperature of 1500 °F.

Prior to initial performance testing (as per Appendix M) final optimized scrubber parameters for pH +/- 20 percent of listed parameters and scrubbant flow rate +/- 20 percent of listed parameters will be evaluated and established based on assessment of VOC outlet concentrations using EPA reference test Method 25A for continuous feedback and analysis. The optimized parameters, to the extent they are different from listed parameters, must be met as of the date of initial performance testing and, as of the date of initial performance testing, replace listed parameters and become an enforceable part of this Consent Decree.

Notes:

- (1) Within three years from lodging of this Consent Decree, Cargill shall undertake performance testing of the scrubber outlet of the integrated feed/bran drying system as per Appendix M to establish an emission limit for this system.
- (2) 3 hour average.
- (3) Operating parameters specified are for each scrubber.
- (4) 850 gpm applies to scrubber for P037 & P040 - 600 gpm applies to scrubber for P058.
- (5) Within five years from the date of lodging of this Consent Decree, Cargill shall submit the emission limits established pursuant to Paragraph 24 and this Appendix as an amendment to the Hammond, Indiana facility's RACT plan; IDEM shall incorporate the emission limits into the RACT plan.
- (6) Within three years from lodging of this Consent Decree, Cargill shall conduct performance testing of the two existing scrubber outlet stacks of the integrated feed/bran drying system as per Appendix M to establish the allowable short-term VOC emission limit for this system. The allowable short-term VOC emission limit will be determined based upon the arithmetic average of the test runs. The measured VOC emission results shall be converted to pounds per hour and multiplied by a factor of 2.2, plus the standard deviation times 2.92 divided by the square root of the number of test runs. The number of test runs shall be not less than three. Emission measurements shall be performed according to U.S. EPA Reference Test Method 25A. In the event U.S. EPA promulgates a new VOC test method and RACT requests Cargill to use such method for purposes of demonstrating compliance with any allowable short-term VOC limits, Cargill shall, within 12 months of such request, conduct emissions testing and establish revised allowable VOC limits, which shall be based on data from the new test method plus the standard deviation times 2.92 divided by the square root of the number of test runs.
- (7) Feed Dyer (89-03-G) shall demonstrate compliance with a control efficiency requirement of 85% control or <= 10 ppm. The temperature limit for the thermal oxidizer shall equal the temperature at which the feed dryer demonstrates 95% control or <= 10 ppm.
- (8) Cargill shall record the pressure drop once per a day, Cargill shall record pH as an average for each 8-hour shift while the emissions unit is in operation.

Appendix J

Dayton Corn Processing

Appendix J – Dayton, Ohio Corn Processing Ozone Cap

Emission Unit Number and Description	Pollutant Included in Ozone Cap	Monitoring
PC Boiler (B004)	NOx	CEM(1)
Package Boiler (B006)	NOx	CEM(1)
Package Boiler (B005)	NOx	Retire
Gluten Drying-Flash (P057)	VOC	Performance Testing (2)(3)
Germ Drying-STD (P031)	VOC	Performance Testing (2)(3)
Germ Drying-STD (P052)	VOC	Performance Testing (2)(3)
Germ Drying-STD (P088)	VOC	Performance Testing (2)(3)
Carbon Furnace -Corn Syrup (P067)	VOC	Performance Testing (2)(3)
Carbon Furnace-Fructose (P582)	VOC	Performance Testing (2)(3)
Gluten Drying-Flash (P072)	VOC	Performance Testing (2)(3)
Feed Dryers-STD (P032, P033 & P034)		
Bran Dryers-Rotary (P040, P058 & P037)	VOC	Performance Testing (2)(3)

Comments:

The 12-month rolling sum total of 854 tons of NOx and VOC emissions from the sources and for the pollutants noted in column 2 above will be used to demonstrate compliance with the ozone cap of 854 tons of VOC and NOx per 12-month period as per paragraphs 25 and 30 of the Consent Decree. Compliance with the 12-month rolling sum ozone cap of 854 tons for the process source VOC and boiler NOx emission sources listed in Appendix J above shall be demonstrated during the first 11 months following the fifth year from lodging of the Consent Decree based on the following schedule of limits in tons per year:

Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11
142	284	356	427	498	567	641	711	749	785	822

In addition to the emissions testing and other requirements of this Appendix J, Cargill shall also comply with the emissions testing requirements set forth in Appendix M, including testing of emission units P032, P033, P034, P040, P058 and P037.

Notes:

- (1) Within five years from lodging of the Consent Decree, NOx emissions will be measured by CEMs and recorded by a data acquisition system. Emissions concentrations recorded by the CEMs will be converted to mass emissions using the air volume as determined by the continuous flow monitor.

Appendix J – Dayton, Ohio Corn Processing Ozone Cap

(2) Within five years from lodging of the Consent Decree, annual VOC performance testing (once per 12-month period) will occur for the VOC sources identified above (P032, P033, P034, P040, P058, P037, P057, P031, P052, P088, P067, P582, & P072). All VOC performance testing will be conducted using U.S. EPA Reference Test Method 25A. All measured VOC results will be converted to a pound per hour basis, and multiplied by 2.2 in accordance with OAC Rule 3745-21-10(C)(7).

An emission factor for each VOC source based on pound per hour VOC emission rates as determined during the most recent testing will be divided by a corresponding process rate (bushels of ground corn for dryer sources and tons of carbon regenerated for carbon furnaces). The emission factor will be used to calculate the monthly sum of VOC emissions that will be combined with the monthly sum of NOx emissions from the NOx sources listed in this Appendix to determine compliance with the ozone cap. If a VOC emission unit identified above is modified within the definition of "modification" under OAC 3745-31-01(PPP), then Cargill will retest the VOC emission rate for such emission unit within 90 days from the modification. Cargill shall track compliance with the ozone cap through completion each month of the Ozone Cap Data Recording and Compliance Demonstration Template included in this Appendix.

(3) Within five years from lodging of the Consent Decree, allowable short-term (lb/hour) VOC emission limits will be established for the VOC emission units listed above (P032, P033, P034, P040, P058, P037, P057, P031, P052, P088, P067, P582, & P072). All VOC performance testing shall be conducted through the use of U.S. EPA Reference Test Method 25A. The allowable short-term VOC emission limits will be based on the average of the initial performance test runs. The measured data based upon U.S. EPA Reference Test Method 25A shall be converted to a pound per hour basis, and multiplied by a factor of 2.2, plus the standard deviation times 2.92 divided by the square root of the number of test runs. The number of test runs shall be not less than three. In the event a new VOC test method is promulgated by U.S. EPA, for purposes of demonstrating compliance with any allowable short-term VOC limits, Cargill shall, within 12-months of a request by RAPCA to use such new method, conduct emissions testing using the new method and establish revised allowable VOC limits based on the average of the measured test runs of that new methodology plus the standard deviation times 2.92 divided by the square root of the number of test runs. The number of test runs shall be not less than three. In the event the new promulgated U.S. EPA test method results in a more stringent allowable short-term VOC emissions limit for any of the VOC emission units identified in this Appendix J, Cargill shall demonstrate compliance with the new short-term limit within 24 months of the date of testing through use of the new promulgated U.S. EPA test method. Compliance demonstration with the ozone cap will not change in the event of promulgation of a new test method and always will be demonstrated using the test methodology specified in note 2 above.

(4) For emission inventory purposes, including payment of emission fees, Cargill shall use the emission factor specified in note 2, above. In the event a new VOC test method is promulgated by U.S. EPA, Cargill shall, within 12-months of a request by RAPCA to use such new method, conduct testing of the VOC units listed above using the new method and use the results of such new method for completion of subsequent emission inventory submittals.

Appendix J – Dayton, Ohio Corn Processing Ozone Cap

Ozone Cap Data Recording and Compliance Demonstration Template

No _x									
Unit ID	Source (Units IDs)	Parameter monitored	Month throughput	Units	Emission factor	Units	Emissions (tons for month)	Data/Emissions Source	
B004	PC Boiler (B004)	NO _x	Input directly from NO _x CEM*					CEM Data (Per Part 60)	
B005	#3 Boiler (B005)	NO _x						CEM Data (Per Part 60)	
B006	#4 Boiler (B006)	NO _x						CEM Data (Per Part 60)	
Total Month Emissions								0.00	

VOC									
Unit ID	Source	Parameter monitored	Month throughput	Units	Emission factor ***	Units	Emissions (tons for month)	Data/Emissions Source	
P057	Gluten/Germ Dryers	corn		bushels		lb/bushel	0.00	Stack Test	
P067	Carbon Furnace - CS	carbon		tons		lb/ton	0.00	Stack Test	
P072	Gluten Dryer	corn		bushels		lb/bushel	0.00	Stack Test	
P582	Carbon Furnace - FX	carbon		tons		lb/ton	0.00	Stack Test	
**	Main Stack	corn		bushels		lb/bushel	0.00	Stack Test	
Total Month Emissions								0.00	

* CEM emission concentrations are converted to mass emissions by using the flow as determined by the continuous flow monitor.

** Main stack sources include: P032, P033, P034, P037, P040, P058

*** Emission factors will be based on most recent stack testing results. Individual unit emission factors and emissions (tons per month) will be recorded and 12-month rolling sum calculated for each month by the 15th of the following month.

Total Monthly Emissions	0.00
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Appendix K

Corn Processing CO Emission Control Plan

Appendix K - Corn Processing CO Emission Control Plan

Facility	Emission Unit Description and Number	Control Device Description	Emission Limit	Parameter(s) Monitored	Compliance Operating Range	Parameter Monitoring Frequency	Schedule (years from logging of Consent Decree)
Blair	Carbon Furnace - Fructose - (58)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Blair	Gluten Drying Flash (8)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Carbon Furnace - Corn Syrup - (EU32)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Cedar Rapids	Feed Drying - Rotary - (EU-72-FD)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Feed Drying - STD - (EU-72-FD)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Germ Drying - Fluid Bed - (EU-113)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Germ Drying - Fluid Bed - (EU-20)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Gluten Drying - STD - (EU-20)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Cedar Rapids	Gluten Drying - STD - (EU-20)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Carbon Furnace - Corn Syrup - (P067)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Dayton	Carbon Furnace - Fructose - (P582)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Dayton	Gluten Drying - Flash - (P057)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P031)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P052)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Germ Drying - STD - (P088)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dayton	Gluten Drying - Flash - (P072)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Carbon Furnace	Zero hearth furnace or thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Carbon Furnace	Zero hearth furnace or thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Decatur	Feed Drying - Rotary	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Dimmitt	Carbon Furnace - (S-304)	Zero hearth furnace or thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Eddyville	Carbon Furnace - (37.000)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Eddyville	Carbon Furnace - (56.000)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3

Appendix K - Corn Processing CO Emission Control Plan

Facility	Emission Unit Description and Number	Control Device Description	Emission Limit	Parameters Monitored	Compliance Operating Range	Parameter Monitoring Frequency	Schedule (years from lodging of Consent Decree)
Hammond	Carbon Furnace - (104-01-R)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Hammond	Feed Drying - Rotary - (124-01-G)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Hammond	Germ Drying - Rotary - (21A-02-G)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Hammond	Germ Drying - Rotary - (51A-02-G)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Carbon Furnace - Corn Syrup - (6008)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Carbon Furnace - Fructose - (9002)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Carbon Furnace - Fructose - (9008)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3
Memphis	Gluten Drying - Flash - (4008B)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Gluten Drying - Flash - (4011)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Germ Drying - STD - (4011)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Memphis	Germ Drying - STD - (4011)	Thermal oxidizer	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	5
Wahpeton	Carbon Furnace - Fructose - (REP41)	Zero hearth furnace	90% control or <= 100 ppm	Operating Temperature	TBD (3 hour average)	Continuously	3

Comments:

In addition, for unit(s) controlled by RTOs not designed for on-line regeneration (i.e., bake-out) and that are not preceded by a WESP or equivalent device(s), the emission limitations do not apply to periods of off-line RTO regeneration not to exceed 50 unit operating hours per calendar year and individual off-line RTO regeneration periods not to exceed 12 unit operating hours. For RTOs servicing more than one unit, a unit operating hour is any hour in which one or more of the unit is on line. Off-line RTO regeneration while all associated units are shut down is not included in these operating limitations. Also, off-line RTO regeneration periods that can be completed during unrelated shutdown, or malfunction periods (i.e., periods not related to the need to perform an off-line RTO regeneration) are not included in these limitations (i.e., Cargill may perform "preventative" off-line RTO regenerations during periods when the RTO is off-line for other reasons such as when the RTO is off-line due to maintenance or malfunction of upstream PM control equipment which requires bypass of the RTO). Cargill may petition EPA and the appropriate state or local regulatory agency to adjust these operating limitations for a specific RTO. With respect to the Dayton, OH facility, all on-line regeneration (bake-out) shall be conducted in accordance with OAC Rules 3745-15-06(A)(3) and 3745-15-06(B).

Appendix L

Hammond Corn Processing Source SO₂ Emission Control Plan

Appendix L - Hammond Corn Processing Process Source SO2 Emission Control Plan

Emission Unit-Description and Number	Control Device Description	Emission Limit	Parameters Monitored	Compliance Operating Range	Parameter Monitoring Frequency
Germ Drying-Rotary (21A-02-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Germ Drying-Rotary (51A-02-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Bran Dryer-Flash (89-01-G)	Scrubber	TBD (note 2)	pH	TBD (NOTE 1)	Once Each Day
Feed Dryer-Rotary (89-03-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Feed Drying-Rotary (124-01-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Gluten Dryer-Flash (121-01-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Germ Drying-Fluid Bed (124A-01-G)	Scrubber	90% control or <=20 ppm	pH	TBD	Once Each Day
Carbon Furnace (104-01-R)	Scrubber	TBD (note 2)	pH	TBD	Once Each Day

Notes:

- (1) The compliance operating range parameters shall be the same as those set forth in Appendix I for this unit.
- (2) To establish emission limits for the Bran Dryer (89-01-G) and Carbon Furnace (104-01-R), Cargill shall operate the scrubbers associated with these emission units at a pH equal to the average of the pH operating ranges for all other sources listed in Appendix L established for purposes of demonstrating compliance with the emission limits listed in Appendix L.

Appendix M

Performance Testing Plan

Appendix M - Performance Testing Plan

Facility	Emission Unit Description and Number	Pollutant Tested	Test Methodology	Testing Schedule
Blair	Carbon Furnace - Fructose - (58)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Blair	Gluten Drying - Flash - (8)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Blair	Steephouse Scrubber - (5)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Cedar Rapids	Carbon Furnace - Corn Syrup - (EU32)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Cedar Rapids	Feed Drying - Rotary - (EU-72-FD)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Feed Drying - STD - (EU-72-FD)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Germ Drying - Fluid Bed - (EU-113)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Germ Drying - Fluid Bed - (EU-20)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Gluten Drying - STD - (EU-20)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Gluten Drying - STD - (EU-20)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Cedar Rapids	Steephouse Scrubber - (EU-41)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Dayton	Bran Dryer - Rotary - (P037) (note 1)	VOC	See note 1	By end of year 3 of lodging of the consent decree
Dayton	Bran Dryer - Rotary - (P040) (1)	VOC	See note 1	By end of year 3 of lodging of the consent decree
Dayton	Bran Dryer - Rotary - (P058) (1)	VOC	See note 1	By end of year 3 of lodging of the consent decree
Dayton	Carbon Furnace - Corn Syrup - (P067) (1)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Dayton	Carbon Furnace - Fructose - (P582) (1)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Dayton	Germ Drying - STD - (P031) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dayton	Germ Drying - STD - (P052) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dayton	Germ Drying - STD - (P088) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dayton	Gluten Drying - Flash - (P057) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dayton	Gluten Drying - Flash - (P072) (1)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Decatur	Carbon Furnace	VOC, CO	Testing done per Appendix O	By end of year 5 of lodging of the consent decree
Decatur	Carbon Furnace	VOC, CO	Testing done per Appendix O	By end of year 5 of lodging of the consent decree
Decatur	Feed Drying - Rotary	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Dimmitt	Carbon Furnace - (S-304)	VOC, CO	Testing done per Appendix O	By end of year 5 of lodging of the consent decree
Dimmitt	Package Boiler - S406	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Dimmitt	Package Boiler - S407	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Eddyville	Carbon Furnace - (37.000)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Eddyville	Carbon Furnace - (56.000)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Eddyville	Millhouse Scrubber - (102.000)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Eddyville	Millhouse Scrubber - (119.000)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Eddyville	Millhouse Scrubber - (9.000)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Fayetteville	Stoker Boiler - ES22	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Gainesville	Stoker Boiler - B001	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Hammond	Bran Dryer - Flash - (89-01-G)	VOC	TBD	By end of year 3 of lodging of the consent decree
Hammond	Carbon Furnace - (104-01-R)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Hammond	Feed Drying - Rotary - (124-01-G)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Hammond	Feed Drying - Rotary - (89-03-G)	VOC	Control Efficiency Testing	By end of year 3 of lodging of the consent decree
Hammond	Germ Drying - Rotary - (21A-02-G)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Hammond	Germ Drying - Rotary - (51A-02-G)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Hammond	Package Boiler - 1002U	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Hammond	Gas Tube & Tile - 1003U	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Hammond	Germ Drying-Rotary - (21A-02-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Germ Drying-Rotary - (51A-02-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree

Appendix M - Performance Testing Plan

Facility	Emission Unit Description and Number	Pollutant Tested	Test Methodology	Testing Schedule
Hammond	Bran Dryer - Flash - (89-01-G)	SO2	40 CFR Part 60 Method 6	By end of year 3 of entry of the consent decree
Hammond	Feed Dryer - Rotary - (89-03-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Feed Drying - Rotary - (124-01-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Gluten Dryer - Flash - (121-01-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Germ Drying - Fluid Bed - (124A-01-G)	SO2	Control Efficiency Testing	By end of year 3 of entry of the consent decree
Hammond	Carbon Furnace - (104-01-R)	SO2	40 CFR Part 60 Method 6	By end of year 3 of entry of the consent decree
Memphis	Bran Dryer - Rotary - (4003)	VOC	TBD	By end of year 3 of lodging of the consent decree
Memphis	Bran Dryer - Rotary - (4003)	VOC	TBD	By end of year 3 of lodging of the consent decree
Memphis	Carbon Furnace - Corn Syrup - (6008)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Memphis	Carbon Furnace - Fructose - (9002)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Memphis	Carbon Furnace - Fructose - (9008)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Memphis	Germ Drying - STD - (4011)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Memphis	Germ Drying - STD - (4011)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Memphis	Gluten Drying - Flash - (4008B)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Memphis	Gluten Drying - Flash - (4011)	VOC, CO	Control Efficiency Testing	By end of year 5 of lodging of the consent decree
Sidney	Stoker Boiler - B001	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Sidney	Stoker Boiler - B002	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Sioux City	Package Boiler - 17	NOx	40 CFR Part 60 Method 7(E)	By end of year 10 of entry of the consent decree
Wahpeton	Carbon Furnace - Fructose - (REP41)	VOC, CO	Testing done per Appendix O	By end of year 3 of lodging of the consent decree
Wahpeton	Gluten Drying - Flash - (FEP21)	VOC	TBD	By end of year 3 of lodging of the consent decree

Comments:

Where exhaust from a specific unit is commingled with exhaust from other sources, compliance will be based on emissions from only the specific unit.

Control Efficiency Testing shall be conducted for VOCs using 40 C.F.R. Part 60, Method 25A; for CO using 40 C.F.R. Part 60, Method 10; and for SO₂ using 40 C.F.R. Part 60, Method 6.

For units listed in Appendices H, I and K, if multiple listed units emit to a single system, Cargill shall demonstrate compliance with any applicable performance standards by demonstrating compliance at the system's end control device that emits to the atmosphere. If the listed units' exhaust is commingled with the exhaust of other units not listed in Appendices H, I and K, Cargill shall demonstrate compliance with the applicable performance standard based on the exhaust of the listed units only.

For new control devices installed after the date of lodging and pursuant to this Consent Decree, Cargill shall conduct testing required by this Appendix M within 180 days after start-up of the newly installed controls.

Notes:

- (1) In addition to the emission testing and other requirements of this Appendix M, Cargill shall also comply with the emissions testing requirements set forth in Appendix J.

Appendix N

Extraction Solvent Loss Recordkeeping Template

Appendix O

Carbon Furnace Test Protocol

Appendix O

CARBON FURNACE TEST PROTOCOL

A Protocol For Determination Of Volatile Organic Compound And Carbon Monoxide Destruction Efficiency For Afterburners Installed On Carbon Furnace Exhausts.

INTRODUCTION

The protocol sets forth the test methodology, technique and monitoring procedures that will be used to establish after burner operating temperatures required to achieve 95% reduction of volatile organic compounds (VOC) and 90% of carbon monoxide (CO) from carbon furnace exhausts.

PROGRAM SCOPE AND TEST STRATEGY

Because afterburners on carbon furnaces are an integrated part of the furnace, it is not possible to install inlet sampling ports to assess inlet VOC and CO concentrations. VOC and CO destruction efficiency for carbon furnace afterburners, therefore, will be determined by comparing uncontrolled conditions with the afterburner shut off (hereinafter referred to as "inlet" conditions), to controlled emissions with the afterburner operating.

Sequential testing of the carbon furnace with the afterburner shut off and with it operating will be completed such that a minimum amount of time elapses between each "inlet" and outlet test. Although time between each inlet and outlet test will be primarily dictated by the amount of time needed for the afterburner to reach a proper operating temperature or cool down, additional measures will be employed to minimize the time between tests. These measures will include dedicating separate analyzers and heated sample lines for the "inlet" and outlet locations (reduces calibration time as well as the time needed to reach a stable sample line background level). Velocity traverses also will be configured so as not to delay testing (see schedule below). Each test run will consist of one 60-minute outlet test (after burner operating), a period between tests where the afterburner is allowed to cool down, and one 60-minute "inlet" test. In all, a total of three runs totaling 120-minutes of measured data each (60 outlet, 60 inlet) will be completed per unit. Emissions between the two 60-minute segments of each test run while the afterburner is cooling down will not be included in the test result. Prior to the second and third test runs time will be allowed to operate and stabilize the afterburner.

For each test run, gas stream velocity, temperature, moisture and fixed gases will be determined to allow for the calculation of gas stream volumetric flowrate. Velocity traverses will be completed for each "inlet" and outlet test. In addition, moisture will be determined during each test (one moisture determination per "inlet" and outlet test) for a total of 6 moisture runs. Fixed gases also will be determined for each test via collection of an integrated sample and analysis in accordance with EPA Method 3. Accordingly, testing of the carbon furnace afterburners for destruction efficiency will be completed as follows:

- Complete Run 1 outlet (controlled condition) velocity traverse.
- Conduct Run 1 outlet test for VOC, CO, moisture, and fixed gases with the afterburner on. Test run duration will be 60 minutes.
- Turn off the afterburner and wait until the temperature in the afterburner is stabilized and within 100 degrees F of the feed hearth temperature.

- Complete Run 1 "inlet" test for VOC, CO, moisture, and fixed gases for 60 minutes. Conduct Run 1 "inlet" velocity traverse.
- Complete Runs 2 and 3 duplicating the steps cited above for Run 1.

GENERAL SOURCE DESCRIPTION

Activated carbon is used to remove natural impurities present in corn syrup. As the carbon adsorbs impurities from the corn syrup, the carbon becomes saturated (spent) with those impurities and becomes less effective. Once the carbon is no longer useful for the process, the carbon is recycled through regeneration in the carbon furnaces.

Carbon regeneration occurs as the spent carbon is fed into the top sections of the multi-hearth furnace. The carbon passes through three separate zones within the furnace. In each zone, the carbon is subjected to different temperatures and atmospheres to drive off the impurities and restore the carbon. A rotating central shaft circulates a rabble arm that mixes and advances the carbon through the hearths exposing them to the counter-current flow of gases.

The three reaction zones, or steps, that occur in the furnace are drying, pyrolysis, and activation.

- A. In the drying, or heating zone (which is the closest zone to the afterburner), water is evaporated off the carbon through the counter-current action of the hot combustion gases. The temperature of the drying zone is approximately 600-1300°F on a six-hearth and 500-1000°F on an eight-hearth furnace.
- B. In the second zone, or pyrolysis zone, the temperature is raised to approximately 1300-1700°F in an oxygen-free atmosphere. Under these conditions, the adsorbed organic impurities are pyrolyzed and volatiles are driven off.
- C. The third zone is the gasification, or activation zone. The temperature in this area approaches 1800°F. The residues from the carbon are oxidized in a manner that prevents damage to the original carbon pore structure. If the carbon is not heated to reaction temperature, or the carbon is improperly dried, the reaction of water vapor, CO₂, and adsorbate will not proceed in an effective regeneration process. Once the carbon passes through the final zone of the multiple hearth furnace, the carbon is sent to the quench tank, and then pumped back to the process.

The afterburner, which follows the drying zone of the furnace, is intended to burn the organic compounds driven off of the carbon that do not burn in the furnace.

During the times of testing, the carbon furnace will be operated at or near its rated throughput capacity.

SAMPLING LOCATION DESCRIPTION

Use or installation of test ports and selection of velocity traverse points will be done in accordance with EPA Method 1 criteria.

MONITORING PROCEDURES

VOC and CO measurements and flow monitoring will be completed using the following methods

- Total Gaseous Organics (VOC) - EPA Method 25A
- Carbon Monoxide (CO) – EPA Method 10
- Stack Gas Volumetric Flow Rate - EPA Method 2
- Fixed Gases - EPA Method 3
- Stack Gas Moisture - EPA Method 4

The following provides a description of the sampling and analytical methods to be employed.

VOC (Total Gaseous Organics) - EPA Method 25A

Emissions testing for VOC will be completed in accordance with EPA Method 25A. In this procedure, stack gas is delivered directly to a heated TGO analyzer equipped with a flame ionization detector (FID). The analyzer is calibrated with known concentrations of propane and results are expressed as propane equivalents.

The sample delivery system consists of an in-stack sintered particulate filter and stainless steel sample probe, a three-way valve assembly for delivery of calibration gases to the system probe, a heat-traced Teflon sample line and sample pump. Sample gas is delivered to the FID analyzer on a wet basis and subsequently converted to dry conditions for calculation of a mass emission rate.

The TGO monitors will be VIG-20 Flame Ionization analyzers. The analyzers are expected to be operated in the 0-10,000 ppm range for the inlet location and the 0-100 ppm range for the outlet. The output signals from each analyzer is connected to strip chart recorders as well as an IBM PC, equipped with a Strawberry Tree, analog to digital converter and Workbench® data acquisition system software. This software provides data in 1-minute averages and calculates TGO emission rates in terms of parts per million (ppmv) and pounds per hour (lbs/hr) for each 1-minute average and for each test run.

Carbon Monoxide – EPA Method 10

Carbon Monoxide will be determined in accordance with EPA Method 10, modified to eliminate the ascarite trap used for CO₂ removal. Use of the ascarite trap is not needed for NDIR analyzers which use the gas filter correlation technique to eliminate CO₂ interference. Samples will be collected in conjunction with each test run using the integrated tedlar bag sampling approach described in the method. At the conclusion of each test run, the contents of the integrated tedlar bag will be analyzed for carbon monoxide concentration using a non-dispersive infrared analyzer (NDIR) with gas filter correlation in accordance with the requirements of EPA Method 10. The analyzer will be calibrated using zero gas and two upscale standards as cited in the test method. All other QC requirements specified by the method will be employed.

Stack Gas Volumetric Flowrate – EPA Method 2

Vent stream volumetric flowrate will be determined in conjunction with each test run in accordance with EPA Method 2. Gas stream temperature and moisture will also be determined in association with each flowrate determination. Temperature will be determined using a thermocouple and pyrometer and gas stream moisture via EPA Method 4.

As previously stated, gas stream velocity will be determined in conjunction with each test (before or after each TGO test) while moisture and fixed gases will be measured simultaneous with each TGO test run. The traverse will be completed across two stack diameters as specified in EPA Method 2. All test ports and traverse points will meet the minimum criteria specified in EPA Method 1.

Fixed Gases (O₂, CO₂)

Fixed gas (O₂, CO₂) measurement used for the determination of stack gas molecular weight will be completed in accordance with EPA Method 3, "Gas Analysis for the Determination of Dry Molecular Weight". This procedure involves collection of an integrated sample followed by analysis for fixed gases using an Orsat analyzer. O₂, CO₂ are measured directly and N₂ is determined by difference.

Stack Gas Moisture

Stack gas moisture will be measured in accordance with the EPA Method 4, "Determination of Moisture Content in Stack Gases", 40 CFR 60, Appendix A. In this procedure a known volume of stack gas is extracted at a fixed rate through a series of water impingers and silica gel and the collected condensate is measured to determine the gas stream percent moisture. Moisture will be determined simultaneous with each 60-minute inlet and outlet test.

TEST METHOD REFERENCES AND MODIFICATIONS

The following provides detailed references for the test methods proposed for this program. Proposed reference method modifications are listed following the appropriate reference.

1. VOC's -- EPA Method 25A, Measurement of Total Gaseous Organic Concentration Using a Flame Ionization Detector, 40 CFR 60, Appendix A. Calibration standards will be prepared using a propane standard in accordance with the method.
2. CO -- EPA Method 10, Determination of Carbon Monoxide Emissions from Stationary Sources, 40 CFR 60, Appendix A.
3. Flow -- EPA Method 2, 40 CFR 60, Appendix A.
4. Moisture -- EPA Method 4, Determination of Moisture Content in Stack Gases - 40 CFR 60, Appendix A.
5. Fixed Gases (O₂, CO₂) -- EPA Method 3, Gas Analysis for Determination of Dry Molecular Weight - 40 CFR 60, Appendix A.

DATA REDUCTION REQUIREMENTS

Concentration data from the Method 25A analysis will be reduced for each operating condition, and converted to a pounds of VOC and CO emitted per hour (lb/hr). The "inlet" or uncontrolled condition lb/hr rate will be compared to the outlet or controlled lb/hr rate and a determination of the percent reduction will be made. The results of each test run as well as the percent reduction will be reported to the agency as follows:

Test Run	Inlet Emissions VOC or CO		Outlet Emissions VOC or CO		Destruction Efficiency (%)
Test Run 1		ppmv		ppmv	
		lb/hr		lb/hr	
Test Run 2		ppmv		ppmv	
		lb/hr		lb/hr	
Test Run 3		ppmv		ppmv	
		lb/hr		lb/hr	
Ave ppmv		ppmv		ppmv	
Ave lb/hr		lb/hr		lb/hr	

Destruction efficiency will be calculated using the following equation:

$$Eff = \frac{C_i - C_o}{C_i}$$

Where:

Eff = Overall destruction efficiency

C_i = Inlet lb/hr emission rate

C_o = Outlet lb/hr emission rate

Appendix P

Supplemental Environmental Projects

Appendix P

Supplemental Environmental Projects

Elimination of Gaseous Sulfur Dioxide – Blair, NE, Cedar Rapids, IA, Dayton, OH, Eddyville, IA and Memphis, TN - Cargill has historically stored gaseous sulfur dioxide at corn wet milling facilities for use in the production process. Gaseous sulfur dioxide is viewed as posing significant environmental and health risks and its storage and use is regulated under 40 CFR Part 68 (Chemical Accident Prevention Provisions) and 29 CFR Part 1910.119 (Process Safety Management of Highly Hazardous Chemicals). Gaseous sulfur dioxide storage exceeds the 40 CFR Part 68 thresholds at Blair, Cedar, Dayton, Eddyville, and Memphis and total gaseous sulfur dioxide storage exceeds 1.2 million pounds at these facilities. This project involves permanent replacement of gaseous sulfur dioxide used in the corn wet milling process with a less hazardous substitute, liquid sodium bisulfide (SBS), which is not subject to either risk management or process safety plan requirements. Project scope will include installation of tanks, piping, and controls for systems located in Blair, Cedar, Dayton, Eddyville, and Memphis, purchase of SBS, and removal of gaseous SO₂ handling capabilities. This project will benefit the environment by eliminating the risk of SO₂ releases through the removal of over 1.2 million pounds of sulfur dioxide storage and reduced SO₂ emissions from facility processes. It is also anticipated that this project would reduce fugitive sulfur dioxide emissions.

Pilot VOC and HAP Reduction Project—Memphis, TN Oxidized Starch Process – VOCs and HAPs are formed in the oxidized starch production process primarily by the reaction of hypochlorite, a bleaching agent, with impurities in the starch. This innovative pollution reduction project will reduce the formation of VOCs and HAPs in the oxidized starch production process, thus reducing associated emissions. The project scope includes the installation and operation of new equipment designed to reduce impurity levels in starch production. Studies by Cargill have determined that reduced impurity levels can significantly reduce formation of VOCs and HAPs in the process. It is anticipated that this project could reduce VOC and HAP emissions from this process by up to 30 percent.

Elimination of Ozone Depleting Substance – Eddyville, IA and Blair, NE – R22 (chlorodifluoromethane) is used in condensers at Cargill's Blair, NE and Eddyville, IA ethanol loadout facilities. These condensers are BACT control devices installed and operated pursuant to the sources' PSD permit. This project is to permanently replace these condensers with an equivalent or better VOC control that results in the removal of R22. Cargill shall not use any of the retired condensers within any of its other facilities (except with a Non-Ozone Depleting Refrigerant) and all refrigerant from the retired condensers shall be either sent for destruction in accordance with the provisions of 40 C.F.R. Part 82.104(h), or reclaimed as defined in 40 C.F.R. Part 82.152, by a certified reclaimer as defined in 40 C.F.R. Part 82.164. This project will benefit the environment by the removal and destruction of over 700 pounds of an ozone depleting substance.

Appendix Q

Notice and Penalty Payment

APPENDIX Q
NOTICE AND PENALTY PAYMENT PROVISIONS

The United States

Payment of penalties:

Payment shall be made in accordance with paragraphs 40 through 42, paragraphs 57 through 59, and paragraph 84 of the Consent Decree.

Contact persons for notices:

Information shall be sent to the appropriate Plaintiffs in accordance with paragraph 84 of the Consent Decree at the addresses below.

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Atlanta, GA 30303
tan.gregory@epa.gov
Phone: 404-562-9697
Fax: 404-562-9486

Please also cc:

Angelia Souder Blackwell
US EPA Region 4
Office of Environmental Accountability
61 Forsyth St. S.W.
Atlanta, GA 30303
blackwell.angelia@epa.gov
Phone: 404-562-9527
Fax: 404-562-9664

U.S. EPA Region 5

Technical Contacts:

Compliance Tracker
US EPA Region 5
77 W. Jackson Blvd AE-17J
Chicago, IL 60604
Phone: 312-886-6797
Fax: 312-353-8289

Counsel:

Kathleen Schnieders
US EPA Region 5
77 W. Jackson Blvd C-14J
Chicago, IL 60604
schnieders.kathleen@epa.gov
Phone: 312-353-8912
Fax: 312-886-0747

U.S. EPA Region 6

Technical Contact:

Raymond Magyar (6EN-AA)
Air Enforcement Section
US EPA Region 6
1445 Ross Avenue Suite 1200
Dallas, TX 75202
magyar.raymond@epa.gov
Phone: 214-665-7288
Fax: 214-665-3177 or 214-665-7446

Counsel:

Patricia Capps Welton (6RC-EA)
Air/Toxics Enforcement Branch
Office of Regional Counsel
US EPA Region 6
1445 Ross Avenue Suite 1200
Dallas, TX 75202-2733
Welton.patricia@epa.gov
Phone: 214-665-7327
Fax: 214-665-3177

U.S. EPA Region 7

Technical Contact:

Richard Tripp ARTD/APCO
US EPA Region 7
901 N. 5th St.
Kansas City, KS 66101
tripp.richard@epa.gov
Phone: 913-551-7566
Fax: 913-551-9566

Counsel:

Belinda Holmes CNSL/REGE
Senior Assistant Regional Counsel
US EPA Region 7
901 N. 5th St.
Kansas City, KS 66101
holmes.belinda@epa.gov
Phone: 913-551-7714
Fax: 913-551-7925

U.S. EPA Region 8

Technical Contact:

Air Program Director c/o Scott Whitmore (8ENF-AT)
Office of Enforcement, Compliance & Environmental Justice
US EPA Region 8
999 18th Street, Suite 300
Denver, CO 80202-2466
Whitmore.scott@epa.gov
Phone: 303-312-6317
Fax: 303-312-6191

State of Alabama

Payment of penalties:

The check must be made payable to the "Alabama Department of Environmental Management." Please make a notation on the check that it is for the Air Division and mail the check to:

Alabama Department of Environmental Management
Air Division

P.O. Box 301463
Montgomery, AL 36130-1463
Attention: Clai Mullens

Contact person for notices:

Ronald W. Gore
Alabama Department of Environmental Management
Air Division
P.O. Box 301463
Montgomery, AL 36130-1463
rwg@adem.state.al.us
Phone: 334-271-7861
Fax: 334-279-3044

State of Georgia

Payment of penalties:

The check must be made payable to the Georgia Department of Natural Resources and must be mailed to:

Georgia Air Protection Branch
4244 International Parkway, Suite 120
Atlanta, GA 30354, Attn. Lou Musgrove

Contact person for notices:

Lou Musgrove, Program Manager
Stationary Source Compliance Program
Georgia Air Protection Branch
4244 International Parkway, Suite 120
Atlanta, GA 30354
Lou_Musgrove@dnr.ga.state.us
Phone: 404-363-7018
Fax: 404-363-7100

State of Illinois

Payment of penalties:

The check shall be made payable to the "Illinois EPA for deposit into the Illinois

Environmental Protection Trust Fund” and mailed to:

Illinois Environmental Protection Agency
Fiscal Services
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Contact person for notices:

Ms. Julie K. Armitage
Illinois Environmental Protection Agency
Bureau of Air
Compliance and Enforcement Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
Julie.Armitage@epa.state.il.us
Phone: 217-782-5811
Fax: 217-782-6348

State of Indiana

Payment of penalties:

Check must be made payable to the “Environmental Management Special Fund.” The check must include the case number of this action and shall be mailed to:

Cashier—Mail Code 50-10C
Indiana Department of Environmental Management
100 N. Senate Avenue
Indianapolis, IN 46204-2251

NOTE: The IDEM case numbers assigned to this case are 2005-14673-A (Layfayette) and 2005-14646-A (Hammond). Please place these numbers on the check so the Cashier will post the check to the appropriate account codes.

Contact person for notices:

Matthew Stuckey
Senior Environmental Manager
Office of Enforcement/Air Section – Mail Code 60-02
Indiana Department of Environmental Management

100 N. Senate Ave.
Indianapolis, IN 46204-2251
mstuckey@dem.state.In.us
Phone: 317-233-1134
Fax: 317-233-5968

State of Iowa

Payment of penalties:

The check must be made to the order of "The State of Iowa" and mailed to:

David R. Sheridan
Assistant Attorney General
Environmental Law Division
Lucas State Office Building
321 E. 12th Street, Room 018
Des Moines, IA 50319

Contact person for notices:

Brian Hutchins, Supervisor
Air Compliance Section
Air Quality Bureau, Iowa DNR
7900 Hickman Rd., Suite 1
Urbandale, IA 50322
Brian.Hutchins@DNR.state.ia.us
Phone: 515-281-8448
Fax: 515-242-5094

Linn County, Iowa

Payment of penalties:

Checks must be made to the order of "Linn County Air Quality Division c/o the Linn County Treasurer," and must be mailed to:

Linn County Public Health Department
501 13th St. NW
Cedar Rapids, IA 52405

Contact person for notices:

Gregory D. Slager
Air Pollution Control Officer
Linn County Public Health Department
501 13th St. NW.
Cedar Rapids, IA 52405
Greg.Slager@linncounty.org
Phone: 319-892-6010
Fax: 319-892-6099

Polk County, Iowa

Payment of penalties:

Checks must be made to the order of the "Polk County Treasurer," and mailed to:

Polk County Treasurer
Polk County Air Quality Division
5885 NE 14th Street
Des Moines, IA 50313

Contact person for notices:

Gary Young, Air Quality Engineer
Polk County Air Quality Division
5885 NE 14th Street
Des Moines, IA 50313
gyoung@co.polk.ia.us
Phone: 515-286-3372
Fax: 515-875-5599

State of Missouri

Payment of penalties:

The check must be payable to the State of Missouri, followed by the name of the county, in parentheses, in which the facility is located ("State of Missouri (Clay County)"). The check should be mailed to the attention of:

Jo Ann Hovath

Assistant Attorney General
P.O. Box 899
Jefferson City, MO 65102-0899

Contact persons for notices:

Timothy P. Duggan
Assistant Attorney General
P.O. Box 899
Jefferson City, MO 65102-0899
tim.duggan@ago.mo.gov
Phone: 573-751-9802
Fax: 573-751-8464

Steve Feeler
Air Pollution Control Program
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102
steve.feeler@dnr.mo.gov
Phone: 573-751-4817
Fax: 573-751-2706

State of Nebraska

Payment of penalties:

The check must be made payable to "Treasurer of Washington County, Nebraska," with the notation "civil penalty," and must be mailed to:

Jodi M. Fenner
Assistant Attorney General
2115 State Capital Building
Lincoln, NE 68509-8920

Contact person for notices:

Shelly Kaderly
Air Division Administrator
1200 "N" Street, Suite 400

P.O. Box 98922
Lincoln, NE 68509-8922
Shelly.kaderly@ndeq.state.ne.us
Phone: 402-471-4299
Fax: 402-471-2909

State of North Carolina

Payment of penalties:

The check shall be made payable to "North Carolina Department of Environment and Natural Resources." Please note that a memo on the check should refer to "STL 2005-001." The check shall be mailed to:

Enforcement Group - Payment
Department of Environment and Natural Resources
Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

Contact person for notices:

Lee A. Daniel, Chief
Technical Services Section
NC Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641
Lee.Daniel@ncmail.net
Phone: 919-733-1471
Fax: 919-733-1812

State of North Dakota

Payment of penalties:

The check must be made payable to "North Dakota Department of Health" and mailed to:

Dave D. Glatt, Chief
Environmental Health Section
North Dakota Department of Health
P.O. Box 5520
Bismarck, ND 58506-5520

Contact person for notices:

Benjamin Gress
Division of Air Quality
North Dakota Department of Health
P.O. Box 5520
Bismarck, ND 58506-5520
bgress@state.nd.us
Phone: 701-328-5188
Fax: 701-328-5200

State of Ohio

Payment of penalties:

The check for the portion of the penalty attributable to the Sidney, Ohio facility should be made out to "Treasurer, State of Ohio," and mailed or delivered to:

Amy Laws, Paralegal
Environmental Enforcement Section
Ohio Attorney General's Office
30 Easte Broad, 25th Floor
Columbus, OH 43215-3400

Contact person for notices:

Jim Orlemann, Assistant Chief
SIP Development and Enforcement
Ohio Environmental Protection Agency
Lazarus Government Center
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216-1049
Jim.Orlemann@epa.state.oh.us
Phone: 614-644-3592
Fax: 614-644-3681

Montgomery County/Regional Air Pollution Control Authority (RAPCA):

Payment of penalties:

The check for the portion of the penalty attributable to the Dayton, Ohio facility must be made payable to the "Air Resources Study Trust Fund," and must be mailed to:

Bruno Maier
RAPCA
117 South Main Street
Dayton, OH 45422-1280

Contact person for notices:

John A. Paul
RAPCA Supervisor
117 South Main Street
Dayton, OH 45422-1280
paulja@rapca.org
Phone: 937-225-5948
Fax: 937-225-3486

Memphis/Shelby County, Tennessee:

Payment of penalties:

The check must be made payable to "Memphis and Shelby County Health Department, Pollution Control Section" and should be mailed to:

Memphis and Shelby County Health Department, Pollution Control Section
814 Jefferson Avenue, 4th Floor
Memphis, Tennessee 38105
Attn: Robert Rogers, P.E.

Contact person for notices:

Robert Rogers, P.E.
Technical Manager
Memphis and Shelby County Health Department
Pollution Control Section
814 Jefferson Avenue, 4th Floor
Memphis, Tennessee 38105
brogers@mschdpollution.org
Phone: 901-544-7587 or 7586
Fax: 901-544-7308