

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

Name of Permitted Facility: Grain Processing Corporation
Facility Location: 1600 Oregon Street, Muscatine, Iowa 52761
Air Quality Operating Permit Number: 03-TV-029R2
Expiration Date: 5/2/2028
Permit Renewal Application Deadline: 11/2/2027

EIQ Number: 92-2259
Facility File Number: 70-01-004

Responsible Official

Name: Mr. Brian Peters
Title: Senior Vice President, Operations
Mailing Address: 1600 Oregon Street, Muscatine, IA 52761
Phone #: (563) 264-4624

Permit Contact Person for the Facility

Name: Mr. Chris Hage
Title: Director of Environmental Services
Mailing Address: 1600 Oregon Street, Muscatine, IA 52761
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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources



05/03/2023

Marnie Stein, Supervisor of Air Operating Permits Section

Date

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Abbreviations

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

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
PM _{2.5}	particulate matter 2.5 microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Grain Processing Corporation

Permit Number: 03-TV-029R2

Facility Description: Wet Corn Milling (SIC 2046)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
Grain Receiving			
181.2	6006.0	SGE Corn Truck Receiving Pit	76-A-268-S3
181.3	6006.1	SGE Elevator Leg #3	19-A-034
	6006.3	SGE East Directional Bins and Transfer Equipment	
181.4	6006.1	SGE Elevator Leg #3	19-A-035
	6006.2	SGE West Directional Bins and Transfer Equipment	
288.0	6008.0	Grain Storage Corn Bin #1	17-A-288
289.0	6009.0	Grain Storage Corn Bin #2	17-A-290
290.0	6010.0	Corn Rail Receiving	17-A-292-S1
	6010.1	Corn Truck Receiving	
293.0	6013.0	Corn Cleaning System	17-A-295
295.0	6015.0	Corn Transfer System Aspiration	17-A-296
Wet Milling			
200N	2810.0 – 2833.0	Corn Wet Mill Steep Tanks 1-24	15-A-200-S2
	2834.0 – 2839.0	Corn Wet Mill Steep Tanks 25-30	
	2895.1	#1 and #2 Wet Mill Grind Bins	
	2896.1	#6 Wet Mill Grind Bin	
	2895.11, 2895.12	Set 1 – Grind Tank #1 and Tank #2	
	2895.21, 2895.22	Set 2 – Grind Tank #1 and Tank #2	
	2895.61, 2895.62	Set 6 – Grind Tank #1 and Tank #2	
	2899.1, 2899.3, 2899.4	Wet Mill Germ Presses #1, #2, #3, #4	
	2899.5	Wet Mill Germ Press #5	
	2896.1	Small Reels Tank	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
200N	2896.2	120 Degree Tank	15-A-200-S2
	2896.3	Big Reels Tank	
	2896.4	60 Degree Tank	
	2896.5	Steepwater Tank	
	2801.1	West Double Runner Tanks	
	2801.2	East Double Runner Tanks	
	2898.1	North Wet Corn Drag Vent Fan	
	2898.4	Wet Germ Hopper Vent Fan	
200S	2840.0 – 2851.0	Corn Wet Mill Steep Tanks 31-42	15-A-201-S2
	2852.0 – 2859.0	Corn Wet Mill Steep Tanks 43-50	
	2860.0 – 2867.0	Corn Wet Mill Steep Tanks 51-58	
	2868.0 – 2871.0	Corn Wet Mill Steep Tanks 59-62	
	2895.3	#3 Wet Mill Grind Bin	
	2895.4	#4 Wet Mill Grind Bin	
	2895.5	#5 Wet Mill Grind Bin	
	2895.31, 2895.32	Set 3 – Grind Tank #1 and Tank #2	
	2895.41, 2895.42	Set 4 – Grind Tank #1 and Tank #2	
	2895.51, 2895.52	Set 5 – Grind Tank #1 and Tank #2	
315.0	2874.0	#5 Wet Mill Germ Dryer	15-A-326-S1
	2894.0	#3 Germ Transfer and Receiver	
296.0	2801.0	#1 Wet Germ Transfer System	17-A-298
	2802.0	#1 Germ Dryer (North Top)	
	2802.1	#2 Germ Dryer (North Bottom)	
297.0	2803.0	#2 Wet Germ Transfer System	17-A-299-S1
	2804.0	#3 Germ Dryer (South Top)	
	2807.0	#4 Germ Dryer (South Bottom)	
198.0	2875.0	Wet Mill, Germ Receiving Bin	17-A-001
557.0	2805.0	Expeller, Whole Germ Receiving	21-A-311
	2876.0	# 1 Expeller	
	2877.0	# 2 Expeller	
	2878.0	# 3 Expeller	
	2879.0	# 4 Expeller	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
557.0	2880.0	# 5 Expeller	21-A-311
	2881.0	# 6 Expeller	
	2888.0	# 13 Expeller	
	2889.0	# 15 Expeller	
	2882.0	# 7 Expeller	
	2883.0	# 8 Expeller	
	2884.0	# 9 Expeller	
	2885.0	# 10 Expeller	
	2886.0	# 11 Expeller	
	2887.0	# 12 Expeller	
	2889.0	# 14 Expeller	
	2892.0	# 16 Expeller	
2893.0	# 17 Expeller		
Feed Recovery			
380.0	1287.0	Old Gluten Day Bin	21-A-159-S1
268.0	1250.0	GP1: Gluten Filter #1	15-A-203
269.0	1251.0	GP1: Gluten Filter #2	15-A-204
270.0	1252.0	GP1: Gluten Filter #3	15-A-205
271.0	1253.0	GP1: Gluten Filter #4	15-A-206
272.0	1254.0	GP1: Gluten Filter #5	15-A-207
325.0	1255.6	GP1: Gluten Filter No. 6	22-A-069
	1255.7	GP1: Gluten Filter No. 7	
326.0	1255.8	GP1: Gluten Filter No. 8	22-A-070
	1255.9	GP1: Gluten Filter No. 9	
312.0	1281.1, 1281.4	GP2: Gluten Filter #1, Gluten Filter #4	15-A-484
313.0	1282.2, 1281.3	GP2: Gluten Filter #2, Gluten Filter #3	15-A-485
314.0	1281.5, 1281.6, 1281.7, 1281.8	GP2: Gluten Filter #5, Gluten Filter #6, Gluten Filter #7, Gluten Filter #8	15-A-486-S1
174.0	1245.0	GP2, #4 Gluten Pre-Mill Cooling System	91-A-068-S3
	1246.0	GP2, #4 Gluten Mill	
531.0	1260.0	Gluten Plant 1 Pneumatic Transport System	03-A-471-S3
319.0	1275.0	Railcar Loading: Gluten	18-A-136-S2
	1247.0	Gluten Plant 2 Pneumatic Transport System	
319.1	1288.0	#1 Gluten Day Bin	18-A-158-S1
195.0	1262.0	Dryer House 4, Spent Germ Receiving	09-A-482-S2
546.0	1264.0	#1 Alpha Laval Centrifuge in Dryer House 4	11-A-338-S1
551.0	1264.8	DH4, #6 Sharples Centrifuge	15-A-354-S1

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
551.0	1264.9	DH4, #7 Sharples Centrifuge	15-A-354-S1
	1265.5	DH4, #5 C-400 Centrifuge	
	1265.6	DH4, #6 C-400 Centrifuge	
	1265.7	DH4, #7 C-400 Centrifuge	
	1265.8	DH4, #8 C-400 Centrifuge	
196.0	1263.0	DH4 and DH5 Rotary Dryers' Product Receiver Cyclone	10-A-563-S2
311.0	1236.0	DH4 Rotary Dryer #5	15-A-213-S3
	1238.0	DH4 Rotary Dryer #6	
	1241.0	DH4 Rotary Dryer #7	
	1282.0	Hulls Surry Tank Vent	
	1285.0	East Thin Stillage Tank Vent	
	1285.1	West Thin Stillage Tank	
	1285.2	West C-400's Thrus Tank	
	1285.3	East C-400's Thrus Tank (Now Oil Tank)	
	1285.4	R-2639-Emergency Syrup Tank	
	1283.0	12-B Whole Stillage Tank Vent	
	1284.1	MR2 Feed Tank	
	1284.2	MR2 Condensate Tank Vent	
	1284.3	MR2 Non Condensibles Vent	
	1264.0	#1 Alfa-Laval Decanter Centrifuge	
	1264.8	ME-1204-R2662-#6 Sharples Decanter Centrifuge	
1264.9	ME-1204-R2663-#7 Sharples Decanter Centrifuge		
	1286.0	DH4 Conveyors: Spent Germ Conveyor, Dry Ingredients Conveyor, Dry Ingredients Drag, #3 & #4 Sharples Discharge Screw Conveyors, #5 Rotary Product Conveyors #1 & 2, #7 & #8 C-400 Discharge Conveyors, #7 & #8 C-400 Cross Conveyors, Combined Feed Collection Conveyor, Inclined Mixing Conveyor, #5, #6 & #7 Rotaries Feed Conveyors, Overflow Drag #1, Rework Conveyors #1 & #2, #5, Combined Rotaries Product Conveyors #1 & #2, DH4 Mill Feed Draver Conveyor	
601.0	1267.0	Dryer House 5 (DH5) Spent Germ Pneumatic Transport	11-A-340-S1
603.0	1269.0	Dryer House 5 (DH5) Mill Feed Receiving from Swiss Combi Dryer	11-A-342-S2
605.0	1278.0	#1 - #5 Alfa Laval Centrifuges	14-A-552-S2
	1279.0	Thin Stillage Tank, Fiber Press Water Tank, Water Heat Evaporator Product Tank	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
605.0	1280.0	Decanter Discharge Screw Conveyor, Fiber Press Cake Conveyor, Blended Cake Transfer Screw Conveyor, Spent Germ and Dried Fiber Transfer Conveyor	14-A-552-S2
	1281.0	#1 - #4 Fiber Dewatering Screw Press	
600.0	1266.0	Dryer House 5 (DH5) Swiss Combi Dryer with Product Cooler and Product Recovery Cyclones	11-A-339-S1
		Dryer Burner	
199.0	1273.1	DH4 Stedman Mill and Product Transport	14-A-502-S1
	1273.2	DH4 Stedman Cage Mill Feed Transport	
	1273.3	DH5 Stedman Mill and Product Transport	
	1273.4	Closed Circuit Fluid Bed Cooler including DH4 Mill Feed Bed Cooler Baghouse	
119.0	1234.0	Dryer House Warehouse #1 Crown Feed Cooler	75-A-353-S2
167.0	1242.0	Dryer House Warehouse #2 Crown Feed Cooler	90-A-111-S1
190A	1256.0	GP2 Gluten Loadout Pneumatic Transport System	02-A-781-S3
190B	1257.0	GP2 Gluten Truck Loadout Bin	02-A-782-S3
179.0	1258.0	Gluten Surge Bin, Feed Loading Surge Bin, GP2 #1 Feed Truck Loadout	92-A-383-S3
180.0	1259.0	Gluten Surge Bin, Feed Loading Surge Bin, GP2 #2 Feed Truck Loadout	92-A-385-S2
318.0	1217.0	GP1 #1 Gluten Flash Dryer w/ Product Recovery Cyclone	19-A-515-S1
	1217.1	GP1 #1 Gluten Flash Dryer Direct Fired Burner	
	1217.2	GP1 #2 Gluten Flash Dryer w/Product Recovery Cyclone	
	1217.3	GP1 #2 Gluten Flash Dryer Direct Fired Burner	
	1244.0	GP2 #4 Gluten Flash Dryer w/six Parallel Product Recovery Cyclones	
	1244.1	GP2 Low-NOx Burner	
WETFEED	1276.0	Wet Feed Pad and Loadout to Truck	15-A-199-S2
RAILCR1	1274.0	Rail Car Loading of Feed	16-A-036
FEEDBRG	1277.0	Feed Barge Loading	16-A-035
Starch			
143.0	2431.0	#1 Starch Flash Dryer, direct fired, with Product Recovery Cyclones	85-A-039-S2
	2431.1	Dryer Duct Burner	
278.0	2433.0	Starch Building	15-A-208
158.0	2424.0	#2 Starch Flash Dryer, direct fired, with Product Recovery Cyclones	90-A-258-S2
	2424.1	Dryer Duct Burner	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
149.0	2419.0	Starch WHSE Food Grade Silo #1	85-A-081-S3
150.0	2420.0	Starch WHSE Food Grade Silo #2	85-A-082-S3
151.0	2421.0	Starch WHSE Food Grade Silo #3	85-A-083-S3
152.0	2422.0	Starch WHSE Food Grade Silo #4	85-A-084-S3
159.0	2425.0	Starch WHSE #5 Starch Silo	90-A-259-S2
160.0	2426.0	Starch WHSE #6 Starch Silo	90-A-260-S2
161.0	2427.0	Starch WHSE #7 Starch Silo	90-A-261-S2
162.0	2428.0	Starch WHSE #8 Starch Silo	90-A-262-S2
171.0	2429.0	Starch WHSE #9 Starch Silo	90-A-359-S2
172.0	2430.0	Starch WHSE #10 Starch Silo	90-A-360-S2
155.0	2423.0	Starch Warehouse, Super Sacker	89-A-085-S2
144.0	2436.0	Starch Warehouse Food-Grade Bagger-Bagging & Super Sacking	90-A-307-S2
122.0	2435.0	Starch Warehouse, Pearl (LR) Silo	76-A-262-S3
130.0	2434.0	Starch Warehouse, Four Starch Industrial Packers	02-A-760-S3
471.0	2437.0	Starch Warehouse, Industrial Modified Starch Bin & Transfer System	03-A-079-S2
95.0	2416.0	Starch South Bulk Loading: Railcar	75-A-246-S2
60.0	2415.0	Starch Quonset Bulk Loadout – Track 3/4 N: Loading Conveyor and Railcar Loading	02-A-952-S1
163.0	2432.0	Starch WHSE, Track #3A Loadout	90-A-263-S2
188.0	2501.0	Ingredient Bin #1 and #2; Super Sack Bag Dump Stations #1 and #2	96-A-1028-S2
	2502.0	Ingredient Bin #3 and #4; Super Sack Bag Dump Stations #1 and #2	
	2503.0	Food Product Bin #1; Product Bin #2	
	2504.0	Product Bin #2; Industrial Product Bin #3	
188.0	2505.0	Steam Heated Indirect Dryer and Cooler, and various pickup points-Product Bin Area, Ingredient Bin Area, Super Sack Dump and Ingredient Blender Area, Grinder and Screener Areas	96-A-1028-S2
	2506.0	Ingredient Blender, Screener #1, Extruder, Grinder Feed Bin, Grinder, and various pick up points-Packaging & Bulk Loadout Areas-Railcar and Truck	
Alcohol EU			
472.0	1068.0	Five (5) Alcohol Pre-fermenters	03-A-342-S2
501.0	1082.0	#1 Beer Column - Vent	None
505.0		#1 Beer Column – Degasifier Vent	
502.0	1083.0	#2 Beer Column - Vent	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
506.0	1083.0	#2 Beer Column – Degasifier Vent	None
509.0		#2 Beer Column Reflux Vent	
503.0	1084.0	#3 Beer Column - Vent	
507.0		#3 Beer Column – Degasifier Vent	
504.0	1085.0	#4 Beer Column - Vent	
508.0		#4 Beer Column – Degasifier Vent	
513.0	1087.0	#2 Alcohol Column -Vent	
514.0	1088.0	#3 Alcohol Column -Vent	
515.0	1089.0	#4 Alcohol Column -Vent	
517.0	1091.0	#3 Extractive Distillation Column -Vents	
518.0	1092.0	#4 Extractive Distillation Column -Vents	
519.0	1093.0	Stripper Column -Vent	
480.0	1072.0	Beer Well Tank #1	
481.0	1073.0	Beer Well Tank #2	
482.0	1074.0	Beer Well Tank #3	
475.0	1066.0	Demethylization Feed Tank	
484.0	1076.0	Demethylization System Vent Condenser #1	
486.0	1078.0	Anhydrous Product Vent Condenser #2	
487.0	1079.0	Anhydrous Vacuum Receiver Vent #2	
408.0	1012.0	Mole Sieve #1 Feed Tank	
309.0	1065.0	Fuel Ethanol Production – Fugitive Acetaldehyde Emission (Equipment Leaks of VOC)	None
400.0	1005.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 1	None
401.0	1006.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 2	
402.0	1007.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 3	
403.0	1008.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 4	
404.0	1009.0	Storage of Reject Anhydrous Alcohol, Ethanol – Dump Tank	
405.0	1010.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 6	
406.0	1011.0	Storage of Reject Anhydrous Alcohol, Ethanol – Dump Tank	
409.0	1014.0	Storage of Anhydrous Alcohol, Ethanol – "A" Scale Tank	
410.0	1015.0	Storage of Anhydrous Alcohol, Ethanol – "B" Scale Tank	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
411.0	1016.0	Storage of Anhydrous Alcohol, Ethanol – "C" Scale Tank	None
413.0	1018.0	Storage of Toluene	
445.0	1050.0	Storage of Anhydrous Alcohol, Ethanol Tank 3H	
446.0	1051.0	Storage of Anhydrous Alcohol, Ethanol Tank 4H	
448.0	1053.0	Storage of Anhydrous Alcohol, Ethanol Tank 6H	
450.0	1055.0	Storage of Anhydrous Alcohol, Ethanol Tank 8H	
451.0	1056.0	Storage of Ethanol Tank 1C	
452.0	1057.0	Storage of Ethanol Tank 2C	
453.0	1058.0	Storage of Ethanol Tank 3C	
459.0	1064.0	Storage of Ethanol – 160 Proof Tank	
321.0	1115.0	Clean Alcohol Barge Loadout (Beverage)	
447.0	1052.0	Storage of Anhydrous Alcohol, Ethanol Tank 5H	19-A-137
449.0	1054.0	Storage of Anhydrous Alcohol, Ethanol Tank 7H	19-A-138
555.0	113.0	#1 Purification Column Feed Tank	17-A-111
556.0	6324.0-6329.0	Mash Fermenters Nos. 24-29	17-A-112-S1
	6330.0-6333.0	Mash Fermenters Nos. 30-33	
	1072.0-1074.0	Beer Wells A, B, D	
	1120.0	Beer Degasification Column #1	
	1082.0-1083.0	Beer Columns #1 and #2	
	1084.0	Beer Column #3	
	1085.0	Beer Column #4	
407.0	1013.0	RD2 Feed Tank	07-A-432
549.0	1067.0	Tank #7 – Anhydrous Alcohol	12-A-255-S1
	1080.0	Tank RJ2 – Anhydrous Alcohol	
550.0	1059.0	Tank 4C, Fixed roof storage tank	14-A-604-S1
	1060.0	Tank 5C, Fixed roof storage tank	
491.0	1098.0	190 Day Lot Tank #1	07-A-433
491.0	1099.0	190 Day Lot Tank #2	07-A-433
	1100.0	190 Day Lot Tank #3	
	1101.0	190 Day Lot Tank #4	
492.0	1102.0	Low Proof Feed Tank	07-A-434
493.0	1103.0	High Proof Feed Tank	07-A-435
494.0	1104.0	High Wines Tank	07-A-436
495.0	1105.0	Low Proof Surge Tank #1	07-A-437
	1106.0	Low Proof Surge Tank #2	
	1107.0	High Proof Surge Tank	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number	
468.0	1125.0	Alcohol Tank Farm E Reject Tank #1	19-A-147-S1	
469.0	1126.0	Alcohol Tank Farm E Reject Tank #2	19-A-148-S1	
532.0	1048.0	"B" Tank Farm Ethanol Storage Tank 1H	03-A-343-S4	
	1049.0	"B" Tank Farm Ethanol Storage Tank 2H		
302.0	1002.0	Alcohol Loading: Methanol Tank	None	
456.0	1061.0	Storage of Ethanol – Isopropyl Tank		
457.0	1062.0	Storage of Ethanol – TBA Bulk Tank		
458.0	1063.0	Storage of Ethanol – Denatured Tank #13		
476.0	1069.0	Ethanol Denaturant Storage Tank – Tank #1		
477.0	1070.0	Ethanol Denaturant Storage Tank – Tank #2		
478.0	1071.0	Ethanol Denaturant Storage Tank – Unleaded Gasoline		
539.0	1097.0	Ethanol Denaturant Storage Tank – #2 Unleaded Gasoline		
483.0	1075.0	Alcohol Tank Truck Loadout		
520.0	1094.1	Alcohol Track 4A Rail Loadout Spout #1		
521.0	1094.2	Alcohol Track 4A Rail Loadout Spout #2		
522.0	1094.3	Alcohol Track 4A Rail Loadout Spout #3		
523.0	1094.4	Alcohol Track 4A Rail Loadout Spout #4		
524.0	1094.5	Alcohol Track 4A Rail Loadout Spout #5		
525.0	1094.6	Alcohol Track 4A Rail Loadout Spout #6		
526.0	1094.7	Alcohol Track 4A Rail Loadout Spout #7		
535.0	1094.10	Alcohol Track 4A Rail Loadout Spout #10		None
527.0	1095.1	Alcohol Beverage Truck Loadout Spout (East)		
528.0	1095.2	Alcohol Anhydrous 200 Truck Loadout Spout		
529.0	1095.3	Alcohol 190 Proof (Heads) Truck Loadout Spout		22-A-023
533.0	1094.8	Alcohol Track 4A RLS Arm #8		
	1094.8B	Alcohol Track 4A RLS Arm #8B		
534.0	1094.9	Alcohol Track 4A RLS Arm #9	22-A-024	
	1094.9B	Alcohol Track 4A RLS Arm #9B		
529.1	1095.4	Alcohol Truck Loadout – Lane 1, Load Arm 2	20-A-186	
527.1	1095.5	Alcohol Truck Loadout – Lane 4, Load Arm 2	20-A-187	
301.0	1116.0	Ethanol Barge Loadout	15-A-498	
Maltrin				
182.0	3115.0	Maltrin – #1 Filter Aid Storage Bin – Diatomaceous Earth	93-A-032-S2	
183.0	3112.0	Maltrin – #2 Filter Aid Storage Bin – Diatomaceous Earth	93-A-033-S2	
184.0	3113.0	Maltrin – #3 Filter Aid Storage Bin – Diatomaceous Earth	93-A-034-S2	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
185.0	3114.0	Maltrin – #1 Carbon Storage Bin – Activated Carbon	93-A-035-S2
66.0	3101.0	Maltrin #1 Spray Dryer	72-A-199-S2
	3101.1	Maltrin #1 Spray Dryer Direct-Fired Burner	
538.0	3120.0	Maltrin #1 Spray Dryer System Cooler	03-A-1371-S2
132.1	3111.0, 3111.1	Maltrin #3 Spray Dryer with Product Recovery Cyclones	80-A-149-S6
132.2		Maltrin #3 Spray Dryer Direct-Fired Burner	80-A-150-S6
135.0	3110.0, 3110.1	Maltrin #4 Spray Dryer with Product Recovery Cyclones	85-A-031-S5
136.0		Maltrin #4 Spray Dryer Direct Fired Low-NOx Line Burner	85-A-032-S5
310.0	3107.0	#5 Maltrin Spray Dryer w/two Parallel Product Recovery Cyclones	90-A-309-S3
	3107.1	Direct Fired Low-NOx burner	
186.0	3116.0, 3116.1	Maltrin #6 Spray Dryer with Product Recovery Cyclones	94-A-055-S3
187.0		Maltrin #6 Spray Dryer Low-NOx Direct-Fired Burner	94-A-061-S3
MALT14	3123.1	Maltrin Storage Bin #1	16-A-032
	3123.2	Maltrin Storage Bin #2	
	3123.3	Maltrin Storage Bin #3	
	3123.4	Maltrin Storage Bin #4	
MALT14	3123.0	Maltrin Pneumatic Transport from Spray Dryer #3 and #5	16-A-032
MALT58	3123.5	Maltrin Storage Bin #5	16-A-033
	3123.6	Maltrin Storage Bin #6	
	3123.7	Maltrin Storage Bin #7	
	3123.8	Maltrin Storage Bin #8	
175.0	3108.0	Maltrin, Product Side 2 Receiver from Spray Dryers #1, #4 and #6	91-A-069-S3
157.0	3107A	Maltrin Supersacker Transfer Receiver	89-A-162-S3
176.0	3125.0	Maltrin Line #1 Packaging Line: 4 baggers	91-A-070-S4
176.0	3126.0	Maltrin Line #2 Packaging Line: 8 baggers	91-A-070-S4
	3127.0	Maltrin Super Sacker	
Cat Litter			
E11	6346.0	N Corn Storage Bin – 3700-bushel capacity	18-A-069
	6347.0	S Corn Storage Bin – 3700-bushel capacity	
E9A	6337.1	Cat Litter Bin #1	17-A-442-S1
E9B	6337.2	Cat Litter Bin #2	17-A-443-S1
EPE-10	6338.0	Cat Litter Pellet Cooler #1	03-A-1415-S6

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EPE-10A	6338.1	Cetec Litter Bagger (indoor vented)	19-A-620-S1
E1	6330.0	Railcar Unloading of litter ingredients, inside building	17-A-035
E12	6340.0	#3 Line Cat Litter Cooler	17-A-036-S1
	6345.0	Cat Litter Bagger	
E13	6341.0	Hammermill	17-A-037-S2
E14	6342.0	Starch Day Bin	17-A-038-S1
E15	6343.0	Cat Litter Holding Bin #3	17-A-039
E16	6344.0	Cat Litter Holding Bin #4	17-A-040
E20	6330.1	Truck Unloading: Raw Products for Cat Litter Production	17-A-041-S1
E7A	6335.0	SBM Bin #1	17-A-323
E7B	6335.1	SBM Bin #2	17-A-324
FLATSTOR	6339.0	Flat Storage Building	17-A-133
Powerhouse			
1.0	5201.0	Power House Boiler #1	95-A-374-S4
1.0	5202.0	Power House Boiler #2	95-A-374-S4
	5203.0	Power House Boiler #3	
	5204.0	Power House Boiler #4	
	5206.0	Power House Boiler #6	
	5207.0	Power House Boiler #7	
142.0	5210.0	Boiler #10	85-A-038-P1
153.0	5211.0	Boiler #11	85-A-135-P1
177.0	5212.0	Power House Boiler #12	93-A-110-P1
189.0	5215.0	Power House Lime Silo	02-A-759-S2
191.0	5220.0	Power House Salt Silo	02-A-787-S2
Process Water			
548.0	6210.0	WWTP Anaerobic Digester #1	11-A-661-S3
	6211.0	WWTP Anaerobic Digester #2	
	6212.0	WWTP Anaerobic Digester #3	
	6214.0	WWTP Anaerobic Digester #4	
548.1	6213.0	Biogas Desulfurization System Aerobic Bioreactor	11-A-662

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
Miscellaneous			
470.0	4901.0	Diesel Firewater Pump	NONE
Plant Roads			
Plant Roads	7001.0	Plant Haul Roads	17-A-297

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
267.0	MR3 Evaporator
298.0	MR1 Non-condensable Evap
299.0	MR2 DH4 Evap
262.0	Sodium Bisulfite Tank
263.0	Y&E Tank 17
303.0	Maltrin HCL Tank
304.0	North Starch HCL Tank
305.0	South Starch HCL Tank
554.0	Cat Litter Vacuum
402.0	MS2 Tank 3
320.0	Starch Insp Room Vacuum
302.0	Methanol tank
316.0	Starch Transloader
193.0	Maltrin Produc Pkg Dust Coll.
317.0	R&D 50HP Boiler
293.1	Corn Cleaner Vent Hopper
324.0	Maltrin Sludge Dump Tank

II. Plant-Wide Conditions

Facility Name: Grain Processing Corporation
Permit Number: 03-TV-029R2

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

Permit Duration

The term of this permit is: Five (5) years.
Commencing on: 5/3/2023
Ending on: 5/2/2028

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

Emission Limits

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

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

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

Particulate Matter:

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

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

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be

used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

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

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

NSPS and NESHAP Requirements

40 CFR 60 Subpart A Requirements

This facility is an affected source and these *General Provisions* apply to the facility. See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart A
567 IAC 23.1(2)

40 CFR 60 Subpart Db Requirements

This facility is subject to Standards of Performance for *Industrial Commercial Institutional Steam Generating Units*.

See Appendix for a link to the Standard.

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

40 CFR 60 Subpart Dc Requirements

This facility is subject to Standards of Performance for *Industrial-Commercial-Institutional Steam Generating Units*.

See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart Dc
567 IAC 23.1(2) "III"

40 CFR 60 Subpart Kb Requirements

This facility is subject to Standards of Performance for *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

See Appendix for a link to the Standard.

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

40 CFR 60 Subpart DD Requirements

The facility is subject to Standards of Performance for *Grain Elevators*.

See Appendix A for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart DD
567 IAC 23.1(2) "ooo"

40 CFR 60 Subpart VV Requirements

The facility is subject to Standards of Performance for *Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* for Which Construction, Reconstruction or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 (40 CFR 60.480 through 40 CFR 60.489). The affected units are equipment in VOC service and any applicable devices and systems (as defined in 40 CFR 60.481) in the entire facility. The owner or operator shall comply with the applicable requirements in 40 CFR 60.480 through 60.489, including recordkeeping requirements in 40 CFR 60.486 and reporting requirements in 40 CFR 60.487.

See Appendix A for a link to the Standard.

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

40 CFR 60 Subpart VVa Requirements

The facility is subject to Standards of Performance for *Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* for Which Construction, Reconstruction or Modification Commenced After November 7, 2006 (40 CFR 60.480a through 40 CFR 60.489a).

The affected units are equipment in VOC service and any applicable devices and systems (as defined in 40 CFR 60.481a) in the entire facility. The owner or operator shall comply with the applicable requirements in 40 CFR 60.480a through 60.489a, including recordkeeping requirements in 40 CFR 60.486a and reporting requirements in 40 CFR 60.487a.

See Appendix A for a link to the Standard.

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

40 CFR 63 Subpart A

This facility is an affected source and these *General Provisions* apply to the facility. See Appendix A for a link to the Standard.

Authority for Requirements: 40 CFR 63 Subpart A
567 IAC 23.1(4)

40 CFR 63 Subpart FFFF Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants for *Miscellaneous Organic Chemical Manufacturing*.

See Appendix A for a link to the Standard.

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

40 CFR 63 Subpart ZZZZ Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants for *Stationary Reciprocating Internal Combustion Engines* (RICE NESHAP).

See Appendix A for a link to the Standard.

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

40 CFR 63 Subpart DDDDD Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. The affected units are: EUs: 5201.0, 5202.0, 5203.0, 5204.0, 5206.0, 5207.0, 5210.0, 5211.0, 5212.0, & 1266.0

Authority for Requirements: 40 CFR 63 Subpart DDDDD

III. Emission Point-Specific Conditions

Facility Name: Grain Processing Corporation
 Permit Number: 03-TV-029R2

Emission Point ID Number: 181.2, 181.3, 181.4

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	Construction Permit
181.2	6006.0	SGE Corn Truck Receiving Pit	Corn	350 tons/hr	Cartridge Filter (CE6006-4)	76-A-268-S3
181.3	6006.1	SGE Elevator Leg #3		15,000 bushels/hr	Cartridge Filter (CE6006-2)	19-A-034
	6006.3	SGE East Directional Bins and Transfer Equipment (See Condition 3 for equipment list.)		20,000 bushels/hr		
181.4	6006.1	SGE Elevator Leg #3		15,000 bushels/hr	Cartridge Filter (CE6006-3)	19-A-035
	6006.2	SGE West Directional Bins and Transfer Equipment (See Condition 3 for equipment list.)		20,000 bushels/hr		

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Emission Point	Pollutant	lb/hr	tons/yr	Other Limits	Authority for Requirement
181.2	Opacity	NA	NA	40% ⁽¹⁾	76-A-268-S3, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.125	NA	NA	76-A-268-S3
	Particulate Matter (PM ₁₀)	0.487	NA	NA	76-A-268-S3
	Particulate Matter (PM) – State	0.487	NA	0.1 gr/dscf	76-A-268-S3, 567 IAC 23.4(7)
181.3	Opacity – stack	NA	NA	0%	19-A-034, 567 IAC 23.1(2)"ooo"
	Particulate Matter (PM _{2.5})	0.171	NA	NA	19-A-034
	Particulate Matter (PM ₁₀)	0.171	NA	NA	19-A-034
	Particulate Matter (PM) – Federal	NA	NA	0.01 gr/dscf	19-A-034, 567 IAC 23.1(2)"ooo"
	Particulate Matter (PM) – State	0.171	NA	0.1 gr/dscf	19-A-034, 567 IAC 23.4(7)
181.4	Opacity – stack	NA	NA	0%	19-A-035, 567 IAC 23.1(2)"ooo"
	Particulate Matter (PM _{2.5})	0.171	NA	NA	19-A-035
	Particulate Matter (PM ₁₀)	0.171	NA	NA	19-A-035
	Particulate Matter (PM) – Federal	NA	NA	0.01 gr/dscf	19-A-035, 567 IAC 23.1(2)"ooo"
	Particulate Matter (PM) – State	0.171	NA	0.1 gr/dscf	19-A-035, 567 IAC 23.4(7)

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in these permits:

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
6006.1, 6006.2, 6006.3	A	General Conditions	Reconstructed	23.1(2)	§60.1 – §60.19
	DD	Grain Elevators	Reconstructed	23.1(2)"ooo"	§60.300 – §60.304

Authority for Requirement: DNR Construction Permits 76-A-268-S3, 19-A-034, 19-A-035

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The total grind for the facility (plant number 70-01-004) is limited to 62.050 million bushels of corn per twelve (12) month rolling period.
 - i. The owner or operator shall record the quantity of corn processed on a monthly basis in bushels.
 - ii. The owner or operator shall calculate and record the 12-month rolling total of the quantity of corn processed in bushels.
- B. The owner or operator shall operate the SGE Corn Truck Receiving Receiving Pit (EU6006.0) in a manner that minimizes un-captured particulate emissions during grain truck unloading. This shall include:
 - i. Operate and maintain baffles under the grating of the unloading operations which open only when grain falls on the baffle in order to reduce the amount of air which must be aspirated through the grating.
 - ii. Operate and maintain enclosures around the receiving pit in order to minimize the influence of wind currents.
- C. The owner or operator shall check for the presence of visible emissions from the SGE Corn Truck Receiving Dump Pit (EU6006.0) once per calendar day. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions during grain truck unloading. If the owner or operator observes visible emissions during grain truck unloading, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the SGE Corn Truck Receiving Dump Pit (EU6006.0) is not in operation.
- D. All grain handling equipment (including, not limited to, conveyors, bucket elevator, turn heads, trippers, and transfer points) and the grain storage bins covered by construction permits 19-A-034 and 19-A-035 shall be enclosed and vented to the Cartridge Filters CE6006-2 and CE6006-3. The owner or operator shall operate and maintain the enclosures and the control systems in a manner so that there are no visible dust emissions to the atmosphere from the grain handling equipment or the grain storage bins when the equipment is operated.
 - i. The owner or operator shall perform a one time visible emission evaluation on the natural draft openings of the grain bins that are covered by construction permits 19-A-034 and 19-A-035.
 - a. The evaluation shall be conducted for a minimum of sixty minutes by using either EPA Method 22 or Method 9.

- b. The evaluation shall be conducted no later than sixty (60) days after the start of operation of Cartridge Filters CE6006-2 and CE6006-3.
 - c. The evaluation shall be done on the natural draft opening(s) of a bin or bins being filled.
 - d. A record shall be maintained on the date of the observation, the bin or bins being observed, and the results of the observation and the correction action taken.
 - e. The results of the observation shall be submitted to the Department as part of the performance testing required by permits 19-A-034 and 19-A-035.
- E. The owner or operator shall implement operating procedures to ensure that all emissions generated during grain filling of the grain bins covered by construction permits 19-A-034 and 19-A-035 are captured and vented to the Cartridge Filters (CE6006-2 and CE6006-3).
 - i. Such operating procedures include but are not limited to:
 - a. aeration fans shall not operate during grain filling,
 - b. aeration fans shall not operate for 30 minutes after each grain filling event,
 - c. control equipment shall operate all times during grain filling
 - ii. The owner or operator shall retain on-site grain filling procedures to ensure all emissions from the grain bins are captured and vented to control equipment.
- F. The differential pressure drop across the Cartridge Filter (CE6006-4) [EP181.2, Receiving Pit] shall be maintained between 1 and 6 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Cartridge Filter (CE6006-4). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Cartridge Filter (CE6006-4), in inches of water, continuously. If the pressure drop across the Cartridge Filter (CE6006-4) falls outside the range specified in Condition 5.F., the owner or operator shall investigate the Cartridge Filter (CE6006-4) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Cartridge Filter (CE6006-4) is not in operation.
- G. The owner or operator shall check for visible emissions from the Cartridge Filter (CE6006-2) [EP181.3, Grain Handling] once per day at a time when Leg #3 and grain handling equipment (EU6006.1 and EU6006.3) are in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Cartridge Filter (CE6006-2), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective

actions taken. This requirement shall not apply on the days when Leg #3 or the grain handling equipment (EU6006.1 and EU6006.3) are not in operation.

- H. The owner or operator shall check for visible emissions from the Cartridge Filter (CE6006-3) [EP181.4, Grain Handling] once per day at a time when Leg #3 and grain handling equipment (EU6006.1 and EU6006.2) are in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Cartridge Filter (CE6006-3), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days when Leg #3 or the grain handling equipment (EU6006.1 and EU6006.2) are not in operation.
- I. The owner or operator shall develop an operating and maintenance plan for the each Cartridge Filter (CE6006-2, CE6006-3, and CE6006-4), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of each Cartridge Filter (CE6006-2, CE6006-3, and CE6006-4).
- J. Cartridge Filters (CE6006-2, CE6006-3, and CE6006-4) shall have a MERV (Minimum Efficiency Reporting Value) rating of no less than 13.
 - i. The owner or operator shall maintain a record of Cartridge Filter (CE6006-2, CE6006-3, and CE6006-4) manufacturer's information with its corresponding MERV rating.
- K. The owner or operator shall permanently cease operation and decommission the equipment specified in Table 2 within 30 days upon the startup date of equipment associated with Project 16-274 (EU6008.0, EU6009.0, EU6010.0, EU6011.0, EU6012.0, EU6013.0 and 6015.0).
 - i. The owner or operator shall maintain a record of the date that the equipment specified in Table 2 of has permanently ceased operation and has been decommissioned.
 - ii. The owner or operator shall rescind the applicable air construction permits associated with the equipment specified in Table 2.

Table 2: Decommissioned Equipment List

Emission Unit Description	Emission Point	Permit No.
North Elevator Corn Receiving, Storage & Transfer	490.0	02-A-687-S2
Corn Cleaner No. 1-4, Corn Day Bin	147.0	85-A-043-S1

Authority for Requirement: DNR Construction Permits 76-A-268-S3, 19-A-034, 19-A-035

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Emission Point	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
181.2	32 Feet	Vertical, unobstructed	26 inches	76°F	12,800 scfm
181.3	142 Feet	Horizontal	7.9 inches x 16.8 inches	88°F	2000 scfm
181.4	142 Feet	Horizontal	7.9 inches x 16.8 inches	88°F	2000 scfm

Authority for Requirement: DNR Construction Permits 76-A-268-S3, 19-A-034, 19-A-035

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 288.0, 289.0

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	Construction Permit
288.0	6008.0	Grain Storage Corn Bin #1	Corn	40,000 bushels of corn/hr, 1.206 MM Bushel (Storage Capacity)	Baghouse (CE 6008-1)	17-A-288
289.0	6009.0	Grain Storage Corn Bin #2	Corn	40,000 bushels of corn per hour, 1.206 MM Bushel (Storage Capacity)	Baghouse (CE 6009-1)	17-A-290

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-288, 17-A-290
567C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.171 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-288, 17-A-290

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.171 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-288, 17-A-290

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.171 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-288, 17-A-290
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall check for visible emissions from the Baghouses (CE 6008-1) and (CE 6009-1) once per day at a time while Grain Bin #1 is being filled with grain. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Baghouses (CE 6008-1) and (CE 6009-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Grain Bin #1 is not filled with grain.
- B. The owner or operator shall implement operating procedures to ensure that all emissions generated during grain filling of Grain Bin #1 are captured and vented to Baghouses (CE 6008-1) and (CE 6009-1).
 - i. Such operating procedures include but are not limited to:
 - a. aeration fans shall not operate during grain filling,
 - b. aeration fans shall not operate for 30 minutes after each grain filling event,
 - c. control equipment shall operate all times during grain filling
 - ii. The owner or operator shall retain on-site grain filling procedures to ensure all emissions are captured and vented to control equipment.
- C. The owner or operator shall develop an operating and maintenance plan for the Baghouses (CE 6008-1) and (CE 6009-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouses (CE 6008-1) and (CE 6009-1).

Authority for Requirement: DNR Construction Permit 17-A-288, 17-A-290

Compliance Plan

The owner/operator of this equipment shall comply with following compliance plan.

- 1) A set of filters (4) and up to (10) will be installed on EP 288.0.
- 2) GPC will test for visible emissions from the bin and signs of visible emissions for the top of the bin. Between each test, the bin will be cleaned to ensure accurate data is collected.
- 3) If filter installation is unsuccessful at controlling visible emissions, GPC will need to redesign the process to achieve no visible emissions.
- 4) GPC will be required to submit quarterly updates to the DNR regarding compliance.

Authority for Requirement: 567 IAC 22.108(15)

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 153

Stack Opening (inches): 7.0 x 16.8

Exhaust Flowrate (cfm): 2,000

Exhaust Temperature (°F): 90

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-288, 17-A-290

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 290.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
6010.0	Corn Rail Receiving	Corn	24,000 bushels of corn per hour ⁽¹⁾	4 Cartridge Filters in Parallel (CE6010-1, CE6010-2, CE6010-3, CE6010-4)
6010.1	Corn Truck Receiving		24,000 bushels of corn per hour ⁽¹⁾	

⁽¹⁾ The maximum rated capacity is 30,000 bushels of corn per hour.

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: DNR Construction Permit 17-A-292-S1
567 IAC 23.1(2)"ooo"

Pollutant: Opacity-Fugitive

Emission Limit(s): 5% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-292-S1
567 IAC 23.1(2)"ooo"

⁽¹⁾ As specified in 40 CFR Part 60§60.320(1), no owner or operator shall discharge to the atmosphere any fugitive emissions from railcar unloading station greater than 5 percent opacity.

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.343 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-292-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.686 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-292-S1

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 0.686 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-292-S1
567 IAC 23.4(7)

Pollutant: Particulate Matter (PM) - Federal
 Emission Limit(s): 0.01 gr/dscf
 Authority for Requirement: DNR Construction Permit 17-A-292-S1
 567 IAC 23.1(2)"ooo"

New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
6010.0, 6010.1	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	DD	Standards of Performance for Grain Elevators	Railcar Unloading Station	23.1(2)"ooo"	§60.300 – §60.304

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. This construction permit is for a grain receiving pit where grain is unloaded by either trucks or railcars. There is a physical limitation to the grain receiving in that only a truck or a railcar, but not both, may be positioned over the grain receiving pit at any one time. Due to this physical restriction, only the Corn Rail Receiving (EU6010.0) or the Corn Truck Receiving (EU6010.1), but not both, may be operated at any one time.
- B. The owner or operator shall operate the Corn Rail Receiving (EU6010.0) and the Corn Truck Receiving (EU6010.1) in such a manner to minimize un-captured particulate matter emissions during grain rail car and truck unloading.
- C. The owner or operator shall check for the presence of visible emissions from the dump pit area of the Corn Rail Receiving (EU6010.0) and the Corn Truck Receiving (EU6010.1) once per calendar day. The owner or operator shall record the date and time of the observation, whether a railcar or a truck was being unloaded, and the presence or absence of visible emissions during grain receiving. If the owner or operator observes visible emissions from the dump pit area during grain receiving, the owner or operator shall investigate the emission unit, the control equipment, or the operations associated with the emission units and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that both the Corn Rail Receiving (EU6010.0) and the Corn Truck Receiving (EU6010.1) are not in operation.
- D. The differential pressure drop across each of the Cartridge Filters (CE6010-1, CE6010-2, CE6010-3, CE6010-4) shall be maintained between 2 and 8 inches of water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across each of the Cartridge Filters (CE6010-1,

CE6010-2, CE6010-3, CE6010-4). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per a written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the pressure drop across each of the Cartridge Filters (CE6010-1, CE6010-2, CE6010-3, CE6010-4), in inches of water, continuously. The owner or operator may average the continuous readings over a 15 minute (or less) time period. The owner or operator shall record the average pressure drop and the corresponding averaging period (if applicable). If the average pressure drop across any of the Cartridge Filters (CE6010-1, CE6010-2, CE6010-3, CE6010-4) falls outside the range specified in Condition 5.D., the owner or operator shall investigate the specific Cartridge Filter and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken, including the identification of the Cartridge Filter. This requirement shall not apply on the days that neither the Corn Rail Receiving (EU6010.0) nor the Corn Truck Receiving (EU6010.1) is in operation.
- E. The owner or operator shall develop an operating and maintenance plan for each Cartridge Filter (CE6010-1, CE6010-2, CE6010-3, CE6010-4), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of each Cartridge Filter (CE6010-1, CE6010-2, CE6010-3, CE6010-4).
- F. The owner or operator shall install Cartridge Filters with a minimum MERV rating of no less than 13.
- i. The owner or operator shall maintain a record of the manufacturer's information on the Cartridge Filters (CE6010-1, CE6010-2, CE6010-3, CE6010-4) which shall include information on the MERV rating of the filter.

Authority for Requirement: DNR Construction Permit 17-A-292-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 30
Stack Opening (inches, dia.): 36
Exhaust Flowrate (cfm): 28,940
Exhaust Temperature (°F): 80
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR Construction Permit 17-A-292-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 291.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
6011.0	Corn Receiving Truck Dump Pit	Corn	20,000 bushels of corn per hour	Cartridge Filter (CE6011-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: DNR Construction Permit 17-A-293-S1
567 IAC 23.1(2)"ooo"

Pollutant: Opacity

Emission Limit(s): 5% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-293-S1
567 IAC 23.1(2)"ooo"

⁽¹⁾As specified in 40 CFR Part 60§60.320(1), no owner or operator shall discharge to the atmosphere any fugitive emissions from railcar unloading station greater than 5 percent opacity.

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.172 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-293-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.344 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-293-S1

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 0.344 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-293-S1
567 IAC 23.4(7)

Pollutant: Particulate Matter (PM) - Federal

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-293-S1
567 IAC 23.1(2)"ooo"

New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
6011.0	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	DD	Standards of Performance for Grain Elevators	Truck Unloading Station	23.1(2)"ooo"	§60.300 – §60.304

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall operate the South Elevator- Corn Receiving Truck Dump Pit (EU6011.0) in a manner to minimize un-captured particulate emissions during grain truck unloading.
- B. The owner or operator shall check for the presence of visible emissions from the South Elevator- Corn Receiving Truck Dump Pit (EU6011.0) once per calendar day. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions during grain truck unloading. If the owner or operator observes visible emissions during grain truck unloading, the owner or operator shall investigate the emission unit, or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the South Elevator- Corn Receiving Truck Dump Pit (EU6011.0) is not in operation.
- C. The owner or operator shall check for visible emissions from EP291.0, Cartridge Filter (CE6011-1) once per day. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the EP291.0, Cartridge Filter (CE6011-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that South Elevator- Corn Receiving Truck Dump Pit (EU6011.0) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for Cartridge Filter (CE6011-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Cartridge Filter (CE6011-1).

E. The owner or operator shall install a Cartridge Filter with a minimum MERV (Minimum Efficiency Reporting Value) rating of no less than 13.

- i. The owner or operator shall maintain a record of Cartridge Filter (CE6011-1) manufacturer's information with corresponding MERV rating.

Authority for Requirement: DNR Construction Permit 17-A-293-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 30

Stack Opening (inches, dia.): 24

Exhaust Flowrate (cfm): 13,083

Exhaust Temperature (°F): 78

Discharge Style: Vertical Discharge

Authority for Requirement: DNR Construction Permit 17-A-293-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 293.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
6013.0	Corn Cleaning System	Corn	15,000 bushels of corn per hour	Baghouse (CE 6013-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: DNR Construction Permit 17-A-295
567 IAC 23.1(2)"ooo"

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.343 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-295

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.686 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-295

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 0.686 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-295
567 IAC 23.4(7)

Pollutant: Particulate Matter (PM) – Federal

Emission Limit(s): 0.01 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-295
567 IAC 23.1(2)"ooo"

New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
6013.0	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	DD	Standards of Performance for Grain Elevators	Grain Handling Operations	23.1(2)"ooo"	§60.300 – §60.304

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The differential pressure drop across Baghouse (CE 6013-1) shall be maintained between 1 and 6 inches of water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE 6013-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE 6013-1), in inches of water, continuously. If the pressure drop across Baghouse (CE 6013-1) falls outside the range specified in Condition 5A, the owner or operator shall investigate v and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE 6013-1) are not in operation.
- B. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE 6013-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE 6013-1).

Authority for Requirement: DNR Construction Permit 17-A-295

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 70
Stack Opening (inches, dia.): 36
Exhaust Flowrate (cfm): 20,000
Exhaust Temperature (°F): 80
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 17-A-295

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
Opacity	Performance Testing ⁽¹⁾	One-Time	1 hour	40 CFR 60, Appendix A, Method 9

⁽¹⁾Performance shall be conducted as specified in 40 CFR Part 60 §60.303.

Authority for Requirement: DNR Construction Permit 17-A-295

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 295.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
6015.0	Corn Transfer System Aspiration	Corn	20,000 bushels of corn per hour	Baghouse (CE 6015-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: DNR Construction Permit 17-A-296
567 IAC 23.1(2)"ooo"

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.171 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-296

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.171 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-296

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 0.171 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-296
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall check for visible emissions from the Baghouse (CE 6015-1) once per day at a time. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Baghouse (CE 6015-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Corn Transfer System Aspiration (EU 6015.0).
- B. The owner or operator shall implement operating procedures to ensure that all emissions generated during grain filling of grain bins are captured and vented to Baghouse (CE 6015-1).
 - i. Such operating procedures include but are not limited to:
 - a. aeration fans shall not operate during grain filling,
 - b. aeration fans shall not operate for 30 minutes after each grain filling event,
 - c. control equipment shall operate all times during grain filling
 - ii. The owner or operator shall retain on-site grain filling procedures to ensure all emissions are captured and vented to control equipment.
- C. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE 6015-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE 6015-1).

Authority for Requirement: DNR Construction Permit 17-A-296

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 142
Stack Opening (inches, dia.): 7.9 x 16.9
Exhaust Flowrate (cfm): 2,000
Exhaust Temperature (°F): 90
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 17-A-296

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 200N

Associated Equipment

Emission Unit Numbers	Emission Unit Descriptions	Raw Material	Rated Capacity	Control Equipment
2810.0 – 2833.0	Corn Wet Mill Steep Tanks 1-24	Corn	3050 Bushels corn (each tank)	Spray Chamber Scrubber (CE2810-1)
2834.0 – 2839.0	Corn Wet Mill Steep Tanks 25-30		4550 Bushels corn (each tank)	
2895.1	#1 and #2 Wet Mill Grind Bins		40 tons corn per hour (each bin)	
2896.1	#6 Wet Mill Grind Bin		40 tons corn per hour	
2895.11, 2895.12	Set 1 – Grind Tank #1 and Tank #2		40 tons corn per hour (each tank)	
2895.21, 2895.22	Set 2 – Grind Tank #1 and Tank #2		40 tons corn per hour (each tank)	
2895.61, 2895.62	Set 6 – Grind Tank #1 and Tank #2		40 tons corn per hour (each tank)	
2899.1, 2899.3, 2899.4	Wet Mill Germ Presses #1, #3, #4		100 tons wet corn per hour (each press)	
2899.5	Wet Mill Germ Press #5		138 tons wet corn per hour	
2896.1	Small Reels Tank		100 tons corn per hour	
2896.2	120 Degree Tank		100 tons corn per hour	
2896.3	Big Reels Tank		100 tons corn per hour	
2896.4	60 Degree Tank		100 tons corn per hour	
2896.5	Steepwater Tank		360,000 gallon storage capacity	
2801.1	West Double Runner Tanks		100 tons corn per hour	
2801.2	East Double Runner Tanks		135 tons corn per hour	
2898.1	North Wet Corn Drag Vent Fan		75,000 bushels per day	
2898.4	Wet Germ Hopper Vent Fan		100 tons corn per hour	

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 15-A-200-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.50 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-200-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.50 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-200-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.50 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 15-A-200-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.80 lb/hr, 500 ppmv

Authority for Requirement: DNR Construction Permit 15-A-200-S2
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 42.7 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-200-S2

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. Sodium bisulfite (NaHSO_3) shall be used as a steeping additive for the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0). Prior to using any other steeping additive as a substitute for sodium bisulfite in the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0), the owner or operator shall apply for, and obtain, a modification to this construction permit.
- B. The concentration of sodium bisulfite in the solution added to the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0) shall not exceed 42% by weight.
 - i. The owner or operator shall maintain a record of a Safety Data Sheet or other supplier information that shows the weight percent of sodium bisulfite in the liquid solution added to the steeping tanks.
- C. The amount of sodium bisulfite added on a wet basis to the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0) shall not exceed 0.40 pounds per bushel of corn on a monthly basis.
 - i. The owner or operator shall maintain the following daily records for the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0):
 - a. The total amount of sodium bisulfite added on a wet basis to the tanks, in pounds; and
 - b. The total amount of corn loaded into the tanks, in bushels.
 - ii. For the Corn Wet Milling Steeping Tanks 1-62 (EU2810.0 – EU2871.0), the owner or operator shall calculate and record for each calendar month the amount of sodium bisulfite added on a wet basis per bushel of corn (pounds NaHSO_3 per bushel).
- D. All emission units specified in the associated equipment table above shall be enclosed so that SO_2 emissions are captured and vented to the control system. At a minimum, the enclosure shall meet Conditions D.i. through D.iii. for the emission units covered by this permit.
 - i. Each emission unit is enclosed at all times during its operation except for process inspections and testing.
 - ii. Access lids or hatches shall be maintained in good condition and shall completely cover equipment openings. The lids and hatches shall be closed except for periods of process inspections and testing.
 - iii. The capture system shall be maintained under negative pressure at all times; i.e. the direction of air flow through any opening shall be into the capture system at all times.

- E. The owner or operator shall develop and implement an operating and monitoring plan to ensure SO₂ emissions are captured and vented to the control system at all times during operation. The owner or operator may update the facility's existing operating and monitoring plan to satisfy this requirement. The plan shall include, at a minimum, the following:
- i. Operators Training Plan: A plan that includes training of operators on the proper function of the equipment's enclosure system and on how to identify and correct deficiencies.
 - ii. Periodic Inspection Plan: A plan for periodic inspections of the equipment, enclosures and capture system to ensure proper operation. The inspection may be done by portable sampling equipment or by other methods developed by the owner or operator. The plan shall include all records related to periodic inspection such as date, inspection method, and results.
 - iii. Corrective Action Plan: A plan that details corrective action(s) that shall be made to the equipment, enclosure, or capture system if the system is not properly capturing SO₂ emissions. The plan shall include all records related to any corrective actions taken.
- F. The total flowrate of the Spray Chamber Scrubber (CE2810-1) liquor shall be maintained at or above 1000 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE2810-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE2810-1), in gallons per minute. If the liquor flow rate to the Spray Chamber Scrubber (CE2810-1) falls below the value specified in Condition F, the owner or operator shall investigate the Spray Chamber Scrubber (CE2810-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2810-1) is not in operation.
- G. The pH range of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-1) shall be maintained between 5 and 8.
- i. The owner or operator shall properly operate and maintain equipment to monitor the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-1) continuously. If the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-1) falls outside the range specified in Condition G, the owner or operator shall investigate the Spray Chamber Scrubber (CE2810-1) and make corrections to them. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2810-1) are not in operation.
- H. The owner or operator shall develop an operating and maintenance plan for the Spray Chamber Scrubber (CE2810-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Spray Chamber Scrubber (CE2810-1).

Authority for Requirement: DNR Construction Permit 15-A-200-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 90

Stack Opening (inches, dia.): 46

Exhaust Flowrate (scfm): 28,300

Exhaust Temperature (°F): 90

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 15-A-200-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant – Sulfur Dioxide (SO₂)

Stack Test to be Completed – Once Every 3 Calendar Years ⁽¹⁾

Test Method – 40 CFR 60, Appendix A, Method 6C

Authority for Requirement – DNR Construction Permit 15-A-200-S2

⁽¹⁾ Performance testing for SO₂ shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the SO₂ emission limit in Condition 1, the owner or operator may request to modify the performance testing frequency for SO₂.

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 200S

Associated Equipment

Emission Unit Numbers	Emission Unit Descriptions	Raw Material	Rated Capacity	Control Equipment
2840.0 – 2851.0	Corn Wet Mill Steep Tanks 31-42	Corn	4550 Bushels corn (each tank)	Spray Chamber Scrubber (CE2810-2)
2852.0 – 2859.0	Corn Wet Mill Steep Tanks 43-50		6700 Bushels corn (each tank)	
2860.0 – 2867.0	Corn Wet Mill Steep Tanks 51-58		4550 Bushels corn (each tank)	
2868.0 – 2871.0	Corn Wet Mill Steep Tanks 59-62		6700 Bushels corn (each tank)	
2895.3	#3 Wet Mill Grind Bin		40 tons corn per hour	
2895.4	#4 Wet Mill Grind Bin		40 tons corn per hour	
2895.5	#5 Wet Mill Grind Bin		40 tons corn per hour	
2895.31, 2895.32	Set 3 – Grind Tank #1 and Tank #2		40 tons corn per hour (each tank)	
2895.41, 2895.42	Set 4 – Grind Tank #1 and Tank #2		40 tons corn per hour (each tank)	
2895.51, 2895.52	Set 5 – Grind Tank #1 and Tank #2		40 tons corn per hour (each tank)	
2896.6	Surge Tank		290 gallons per minute	
2898.2	South Wet Corn Drag Vent Fan		101,000 bushels corn per day	

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 15-A-201-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.25 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-201-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.25 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-201-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.25 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 15-A-201-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 3.17 lb/hr, 500 ppmv

Authority for Requirement: DNR Construction Permit 15-A-201-S2
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 48.3 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-201-S2

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. Sodium bisulfite (NaHSO_3) shall be used as a steeping additive for the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0). Prior to using any other steeping additive as a substitute for sodium bisulfite in the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0), the owner or operator shall apply for, and obtain, a modification to this construction permit.
- B. The concentration of sodium bisulfite in the solution added to the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0) shall not exceed 42% by weight.
 - i. The owner or operator shall maintain a record of a Safety Data Sheet or other supplier information that shows the weight percent of sodium bisulfite in the liquid solution added to the steeping tanks.
- C. The amount of sodium bisulfite added on a wet basis to the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0) shall not exceed 0.40 pounds per bushel of corn on a monthly basis.
 - i. The owner or operator shall maintain the following daily records for the Corn Wet Mill Steeping Tanks 1-62 (EU2810.0 – EU2871.0):
 - a. The total amount of sodium bisulfite added on a wet basis to the tanks, in pounds; and
 - b. The total amount of corn loaded into the tanks, in bushels.
 - ii. For the Corn Wet Milling Steeping Tanks 1-62 (EU2810.0 – EU2871.0), the owner or operator shall calculate for each calendar month the amount of sodium bisulfite added on a wet basis per bushel of corn (pounds NAHSO_3 per bushel).
- D. All emission units specified in the Associated Equipment section of this permit shall be enclosed so that SO_2 emissions are captured and vented to the control system. At a minimum, the enclosure shall meet Conditions D.i. through D.iii. for the emission units covered by this permit.
 - i. Each emission unit is completely enclosed at all times during its operation except for process inspections and testing.
 - ii. Access lids or hatches shall be maintained in good condition and shall completely cover equipment openings. The lids and hatches shall be closed except for periods of process inspections and testing.
 - iii. The capture system shall be maintained under negative pressure at all times; i.e. the direction of air flow through any opening shall be into the capture system at all times.

- E. The owner or operator shall develop and implement an operating and monitoring plan to ensure SO₂ emissions are captured and vented to the control system at times during operation. The owner or operator may update the facility's existing operating and monitoring plan to satisfy this requirement. The plan shall include, at a minimum, the following:
- i. Operators Training Plan: A plan that includes training of operators on the proper function of the equipment's enclosure system and on how to identify and correct deficiencies.
 - ii. Periodic Inspection Plan: A plan for periodic inspections of the equipment, enclosures and capture system to ensure proper operation. The inspection may be done by portable sampling equipment or by other methods developed by the owner or operator. The plan shall include all records related to periodic inspection such as date, inspection method, and results.
 - iii. Corrective Action Plan: A plan that details corrective action(s) that shall be made to the equipment, enclosure or capture system if the system is not operating properly capturing SO₂ emissions. The plan shall include all records related to any corrective actions taken.
- F. The total flowrate of the Spray Chamber Scrubber (CE2810-2) liquor shall be maintained at or above 1000 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE2810-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE2810-2), in gallons per minute. If the liquor flow rate to the Spray Chamber Scrubber (CE2810-1) falls below the value specified in Condition F, the owner or operator shall investigate the Spray Chamber Scrubber (CE2810-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2810-2) is not in operation.
- G. The pH range of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-2) shall be maintained between 5 and 8.
- i. The owner or operator shall properly operate and maintain equipment to monitor the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-2) continuously. If the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE2810-2) falls outside the range specified in Condition G, the owner or operator shall investigate the Spray Chamber Scrubber (CE2810-2) and make corrections to them. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2810-2) are not in operation.
- H. The owner or operator shall develop an operating and maintenance plan for the Spray Chamber Scrubber (CE2810-2) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Spray Chamber Scrubber (CE2810-2).

Authority for Requirement: DNR Construction Permit 15-A-201-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 90

Stack Opening (inches, dia.): 46

Exhaust Flowrate (scfm): 28,100

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 15-A-201-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant – Sulfur Dioxide (SO₂)

Stack Test to be Completed – Once Every 3 Calendar Years ⁽¹⁾

Test Method – 40 CFR 60, Appendix A, Method 6C

Authority for Requirement – DNR Construction Permit 15-A-201-S2

⁽¹⁾ Performance testing for SO₂ shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the SO₂ emission limit in Condition 1, the owner or operator may request to modify the performance testing frequency for SO₂.

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 315.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2874.0	#5 Wet Mill Germ Dryer with Product Recovery Cyclone (CE2874-1)	Wet Germ	9.0 tons of dried germ per hour	Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2)
2894.0	#3 Germ Transfer and Receiver with Product Recovery Cyclone (CE2894-1)		NA	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 15-A-326-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.50 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-326-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.40 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-326-S1

Pollutant: Particulate Matter

Emission Limit: 1.40 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 15-A-326-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.70 lb/hr (RACT limit); 90% Control Efficiency or 10 ppm_{v,d} ⁽²⁾⁽³⁾

Authority for Requirement: DNR Construction Permit 15-A-326-S1

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 130 ppm_{v,d}⁽²⁾

Authority for Requirement: DNR Construction Permit 15-A-326-S1

⁽²⁾The limit for SO₂ and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)] as amended on March 26, 2019.

⁽³⁾Limit requires 90 percent control efficiency across Scrubbing System (CE2874-2) or SO₂ concentration of 10 ppm_{v,d} from the outlet of EP315.0. Compliance with limit shall be demonstrated by measuring the inlet and outlet SO₂ concentration and flowrate of Scrubbing System (CE2874-2) to determine control efficiency of Scrubbing System (CE2874-2) or measuring the outlet SO₂ concentration from EP315.0. Control efficiency is defined as $\left[\frac{\text{inlet mass rate} - \text{outlet mass rate}}{\text{inlet mass rate}} \right] \times 100$.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

#5 Germ Dryer (EU2874.0)

- A. The #5 Germ Dryer (EU2874.0) is limited to a maximum operating capacity of 9 tons of dried germ per hour.
 - i. The owner or operator shall maintain an interlock system on #5 Germ Dryer conveyors to ensure that #5 Germ Dryer cannot operate alone but must operate with either #1, #2, #3, or #4 Germ Dryers at all times.
 - ii. The owner or operator shall continuously monitor operation of each germ dryer to ensure that #5 Germ Dryer is operating in conjunction with either #1, #2, #3, or #4 Germ Dryers at all times.
 - iii. The owner or operator shall operate a variable speed drive on the germ feed screw conveyor to #5 Germ Dryer so that motor on #5 Germ Dryer does not operate no more than 54 Hertz.
 - iv. The owner or operator shall conduct daily inspections of #5 Germ Dryer and related equipment that includes conveyors and the germ feed screw conveyor variable speed drive.
 - v. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of #5 Germ Dryer and related equipment.

Control Equipment-Scrubber

- B. The Venturi Scrubber (CE2874-2) total liquor flowrate shall be maintained at or above 138 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Venturi Scrubber (CE2874-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to the Venturi Scrubber (CE2874-2), in gallons per minute, continuously. If the total liquor flow rate to the Venturi Scrubber (CE2874-2) falls below the value specified in Condition B, the owner or operator shall investigate the Venturi Scrubber (CE2874-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2874-2) is not in operation.
- C. The pressure drop across Venturi Scrubber (CE2874-2) shall be maintained between 10 to 14 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Venturi Scrubber (CE2874-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Venturi Scrubber (CE2874-2), in inches of water, continuously. If the pressure drop across the Venturi Scrubber (CE2874-2) falls outside the range specified in Condition C, the owner or operator shall investigate the Venturi Scrubber (CE2874-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2874-2) is not in operation.
- D. The 4-Stage Spray Tower Scrubber (CE2874-2) total liquor flowrate shall be maintained at or above 600 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the 4-Stage Spray Tower Scrubber (CE2874-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the total liquor flow rate to the 4-Stage Spray Tower Scrubber (CE2874-2), in gallons per minute, continuously. If the total liquor flow rate to the 4-Stage Spray Tower Scrubber (CE2874-2) falls below the value specified in Condition D, the owner or operator shall investigate the 4-Stage Spray Tower Scrubber (CE2874-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the 4-Stage Spray Tower Scrubber (CE2874-2) is not in operation.
- E. The pH range of the scrubbing liquor in Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2) shall be maintained between 5 and 8.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the scrubbing liquor pH in Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2), on a continuous basis. If the pH of the scrubbing liquor in Scrubber (CE2874-2) falls outside the range specified in Condition E, the owner or operator shall investigate Scrubber (CE2874-2) and make corrections to Scrubber (CE2874-2). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Scrubber (CE2874-2) is not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Venturi Scrubber followed by 4-stage Spray Tower Scrubbing System (CE2874-2).
- G. The owner or operator shall maintain Product Recovery Cyclone (CE2874-1) and Product Recovery Cyclone (CE2894-1) in manner to ensure proper operation.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclone (CE2874-1).
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclone (CE2894-1).

Authority for Requirement: DNR Construction Permit 15-A-326-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 90

Stack Diameter (inches): 40

Stack Exhaust Flow Rate (scfm): 12,500

Stack Temperature (°F): 160

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 15-A-326-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance Test ³	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀	Performance Test ²	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Test	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
SO ₂	Performance Test	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 6C

⁽¹⁾ After the initial performance test, performance testing for PM, PM₁₀, PM_{2.5}, and SO₂ shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM₁₀, PM_{2.5}, and SO₂ emission limits in Condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, PM_{2.5}, opacity, and SO₂.

⁽²⁾ It is acceptable to test for PM and to assume that all PM emissions are PM₁₀ emissions.

⁽³⁾ If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the PM_{2.5} limit as specified in Condition 10 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried germ product (immediately following the dryer) to determine the PM_{2.5} fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered PM_{2.5}.

Authority for Requirement: DNR Construction Permit 15-A-326-S1

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 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)

Emission Point ID Number: 296.0 (North)

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2801.0	#1 Wet Germ Transfer System with Product Recovery Cyclone (CE2801-1)	Dry Germ	6.65 tons/hr dry germ	Venturi Scrubber w/ Mist Eliminator (CE2802-2), Spray Chamber Scrubber (CE2802-3)
2802.0	#1 Germ Dryer (North Top) with Product Recovery Cyclone (CE2802-1)	Dry Germ	6.65 tons/hr dry germ	
2802.1	#2 Germ Dryer (North Bottom) with Product Recovery Cyclone (CE2802-1)	Dry Germ	13.3 tons/hr dry germ	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-298
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.60 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-298

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.96 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-298

Pollutant: Particulate Matter

Emission Limit: 0.96 lb/hr; 0.1 gr/scf

Authority for Requirement: DNR Construction Permit 17-A-298
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit: 3.8 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 17-A-298

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit: 9.6 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-298

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The total flowrate of the Venturi Scrubber's (CE2802-2) liquor shall be maintained at or above 130 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Venturi Scrubber (CE2802-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Venturi Scrubber (CE2802-2), in gallons per minute. If the liquor flow rate to the Venturi Scrubber (CE2802-2) falls below the value specified in Condition 5A, the owner or operator shall investigate the Venturi Scrubber (CE2802-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2802-2) is not in operation.
- B. The differential pressure drop across the Venturi Scrubber (CE2802-2) shall be maintained between 11 and 20 inches of water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Venturi Scrubber (CE2802-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall continuously collect and record the pressure drop across the Venturi Scrubber (CE2802-2), in inches of water column. If the pressure drop across the Venturi Scrubber (CE2802-2) falls outside the range specified in Condition 5B., the owner or operator shall investigate the Venturi Scrubber (CE2802-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2802-2) is not in operation.

- C. The pH range of the scrubbing liquor in the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber shall be maintained between 5 and 8.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the pH of the scrubbing liquor in the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pH of the scrubbing liquor for the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) continuously. If the pH of the scrubbing liquor in the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) falls outside the range specified in Condition C., the owner or operator shall investigate the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) and make corrections to them. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) are not in operation.
- D. The total flowrate of the Spray Chamber Scrubber (CE2802-3) liquor shall be maintained at or above 600 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE2802-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE2802-3), in gallons per minute. If the liquor flow rate to the Spray Chamber Scrubber (CE2802-3) falls below the value specified in Condition D, the owner or operator shall investigate the Spray Chamber Scrubber and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2802-3) is not in operation.
- E. The owner or operator shall develop an operating and maintenance plan for the cyclones (CE2801-1 and CE2802-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the cyclones (CE2801-1 and CE2802-1).

- F. The owner or operator shall develop an operating and maintenance plan for the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Venturi Scrubber (CE2802-2) and the Spray Chamber Scrubber (CE2802-3).
- G. No later than sixty (60) days after the issuance date of construction permit 17-A-298, the owner or operator shall submit a letter to the Department requesting that air construction permits 15-A-078 (EP14.0) and 79-A-194-S2 (EP15.0) be rescinded.

Authority for Requirement: DNR Construction Permit 17-A-298

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 90

Stack Opening (inches, dia.): 42

Exhaust Flowrate (dscfm): 12,170

Exhaust Temperature (°F): 160

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-298

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance Test ³	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀	Performance Test ²	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Test	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
SO ₂	Performance Test	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 6C

⁽¹⁾ After the initial performance test, performance testing for PM, PM₁₀, PM_{2.5}, and SO₂ shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM₁₀, PM_{2.5}, and SO₂ emission limits in Condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, PM_{2.5}, opacity, and SO₂.

⁽²⁾ It is acceptable to test for PM and to assume that all PM emissions are PM₁₀ emissions.

⁽³⁾ If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the PM_{2.5} limit as specified in Condition 10 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried germ product (immediately following the dryer) to determine the PM_{2.5} fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered PM_{2.5}.

Authority for Requirement: DNR Construction Permit 17-A-298

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 297.0 (South)

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2803.0	#2 Wet Germ Transfer System with Product Recovery Cyclone (CE2803-1)	Dry Germ	6.65 tons/hr dry germ	Venturi Scrubber w/ Mist Eliminator (CE2804-2), Spray Chamber Scrubber (CE2804-3)
2804.0	#3 Germ Dryer (South Top) with Product Recovery Cyclone (CE2804-1)	Dry Germ	6.65 tons/hr dry germ	
2807.0	#4 Germ Dryer (South Bottom) with Product Recovery Cyclone (CE2807-1)	Dry Germ	13.3 tons/hr dry germ	

Maximum rated capacity for EU2803.0 and EU2804.0 is 9.0 tons/hr, dry germ.

Maximum rated capacity for EU2807.0 is 13.3 tons/hr, dry germ.

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-299-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.74 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-299-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.74 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-299-S1

Pollutant: Particulate Matter

Emission Limit: 0.74 lb/hr; 0.1 gr/scf

Authority for Requirement: DNR Construction Permit 17-A-299-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit: 2.05 lb/hr; 500 ppmv
Authority for Requirement: DNR Construction Permit 17-A-299-S1

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit: 10.4 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-299-S1

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The #3 Germ Dryer (EU2804.0) is limited to a maximum operating capacity of 6.65 tons of dried germ per hour. The #4 Germ Dryer (EU2807.0) has a maximum capacity of 13.3 tons of dried germ per hour.
 - i. As part of the stack test report that is submitted for any required performance test on EP297.0, the owner or operator shall provide the Department the following information:
 - a. The hourly rate of germ processed by #3 Germ Dryer (EU2804.0) and by #4 Germ Dryer (EU2807.0) for each test run, in tons of dried germ per hour;
 - b. Information on what parameters were monitored during the performance test to determine the amount of germ processed by #3 Germ Dryer (EU2804.0) and by #4 Germ Dryer (EU2807.0) during the test; and
 - c. Calculations or a detailed explanation that show how the hourly rate of germ processed by #3 Germ Dryer (EU2804.0) and by #4 Germ Dryer (EU2807.0) was determined for each test run.
- B. The total flowrate of the Venturi Scrubber's (CE2804-2) liquor shall be maintained at or above 130 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Venturi Scrubber (CE2804-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Venturi Scrubber (CE2804-2), in gallons per minute. If the liquor flow rate to the Venturi Scrubber (CE2804-2) falls below the value specified in Condition 5.B., the owner or operator shall investigate the Venturi Scrubber (CE28404-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2804-2) is not in operation.

- C. The differential pressure drop across the Venturi Scrubber (CE2804-2) shall be maintained between 16 and 25 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Venturi Scrubber (CE2804-2). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall continuously collect and record the pressure drop across the Venturi Scrubber (CE2804-2), in inches of water column. If the pressure drop across the Venturi Scrubber (CE2804-2) falls outside the range specified in Condition C., the owner or operator shall investigate the Venturi Scrubber (CE2804-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2804-2) is not in operation.
- D. The pH range of the scrubbing liquor in the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) shall be maintained between 5 and 8.
- i. The owner or operator shall properly operate and maintain equipment to monitor the pH of the scrubbing liquor in the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pH of the scrubbing liquor for the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) continuously. If the pH of the scrubbing liquor in the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) falls outside the range specified in Condition D., the owner or operator shall investigate the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) and make corrections to them. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) are not in operation.
- E. The total flowrate of the Spray Chamber Scrubber (CE2804-3) liquor shall be maintained at or above 590 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE2804-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE2804-3), in gallons per minute. If the liquor flow rate to the Spray Chamber Scrubber (CE2804-3) falls below the value specified in Condition E., the owner or operator shall investigate the Spray Chamber Scrubber (CE2804-3) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE2804-3) is not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the cyclones (CE2803-1, CE2804-1, CE2807-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the cyclones (CE2803-1, CE2804-1, and CE2807-1).
- G. The owner or operator shall develop an operating and maintenance plan for the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Venturi Scrubber (CE2804-2) and the Spray Chamber Scrubber (CE2804-3).

Authority for Requirement: DNR Construction Permit 17-A-299-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 90

Stack Opening (inches, dia.): 42

Exhaust Flowrate (dscfm): 13,800

Exhaust Temperature (°F): 160

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-299-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance Test ⁽³⁾	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀	Performance Test ⁽²⁾	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Test	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
SO ₂	Performance Test	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 6C

⁽¹⁾Performance testing for PM, PM₁₀, PM_{2.5}, and SO₂ shall be conducted once every 3 calendar years. The last performance test was conducted on October 6, 2020. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM₁₀, PM_{2.5}, and SO₂ emission limits in Condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, PM_{2.5}, opacity, and SO₂.

⁽²⁾ It is acceptable to test for PM and to assume that all PM emissions are PM₁₀ emissions.

⁽³⁾ If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the PM_{2.5} limit as specified in Condition 10 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried germ product (immediately following the dryer) to determine the PM_{2.5} fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered PM_{2.5}.

Authority for Requirement: DNR Construction Permit 17-A-299-S1

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 198.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2875.0	Wet Mill, Germ Receiving Bin	Germ	14.7 tons of germ per hour	None

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-001
567C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.009 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-001

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.009 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-001

Pollutant: Particulate Matter

Emission Limit: 0.009 lb/hr; 0.1 gr/scf

Authority for Requirement: DNR Construction Permit 17-A-001
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The owner or operator shall at all times employ best management practices to minimize or eliminate particulate matter emissions from this emissions unit (EU2875.0), (e.g. keeping bin hatch closed).

Authority for Requirement: DNR Construction Permit 17-A-001

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 49.5

Stack Opening (inches, dia.): 10.5 x 10.5

Exhaust Flowrate (dscfm): 13

Exhaust Temperature (°F): 120

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-001

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 557.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Rated Capacity (tons/hr)	Raw Material	Control Equipment
2876.0	# 1 Expeller	0.95	Dry Germ	Regenerative Thermal Oxidizer with Duct Washing System and Cyclonic Separator (CE 2876-2), Maximum Heat Input: 5.832 MMBtu per hour with Low NOx Burners @ 2.145 MMBtu/hr
2877.0	# 2 Expeller	0.95		
2878.0	# 3 Expeller	0.95		
2879.0	# 4 Expeller	0.95		
2880.0	# 5 Expeller	0.95		
2881.0	# 6 Expeller	0.95		
2888.0	# 13 Expeller	0.95		
2889.0	# 15 Expeller	0.95		
2882.0	# 7 Expeller	0.978		
2883.0	# 8 Expeller	0.978		
2884.0	# 9 Expeller	0.978		
2885.0	# 10 Expeller	0.978		
2886.0	# 11 Expeller	0.978		
2887.0	# 12 Expeller	0.978		
2889.0	# 14 Expeller	0.978		
2892.0	# 16 Expeller	0.978		
2893.0	# 17 Expeller	0.978		
2805.0	Expeller, Whole Germ Receiving	13.3		Pulse Jet Baghouse (CE2805-2)
	Expeller Building Aspiration (4 building pickup points)	NA		

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 21-A-311
567C 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})
Emission Limit(s): 1.74 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-311

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 1.74 lb/hr
Authority for Requirement: DNR Construction Permit 21-A-311

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.74 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 21-A-311
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.70 lb/hr (RACT limit); 10.0 ppm_{v,d} ⁽²⁾
Authority for Requirement: DNR Construction Permit 21-A-311

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.56 lb/hr; 18.7 ppm_{v,d} ⁽²⁾
Authority for Requirement: DNR Construction Permit 21-A-311

⁽²⁾ Required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

LAER Emission Limit

Pollutant: Particulate Matter (PM) - State
Emission Limit(s): 0.078 gr/scf ⁽³⁾
Authority for Requirement: DNR Construction Permit 21-A-311
567 IAC 31.20(1)"d"

⁽³⁾ Limit established when the Muscatine Area was designated non-attainment for TSP (PM). The emission units associated with the East Baghouse (CE 2882-1) are subject to a Lowest Achievable Emission Rate (LAER) limit of 0.078 gr/scf. Those units are Expellers #7 – 12, 14, 16, and 17 (EUs 2882 – 2887, 2889, 2892 – 2893, respectively).

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The owner or operator shall maintain a Regenerative Thermal Oxidizer (CE 2876-2) combustion chamber temperature to no less than 1,400 degrees Fahrenheit based on a 3-hour block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the chamber temperature of Regenerative Thermal Oxidizer (CE 2876-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the combustion chamber temperature of Regenerative Thermal Oxidizer (CE 2876-2), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of Regenerative Thermal Oxidizer (CE 2876-2) falls below the value specified in Condition 5A, the owner or operator shall investigate Regenerative Thermal Oxidizer (CE 2876-2) and make corrections Regenerative Thermal Oxidizer (CE 2876-2). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Regenerative Thermal Oxidizer (CE 2876-2) is not in operation.
- B. The owner or operator shall combust only natural gas or process off-gasses in Regenerative Thermal Oxidizer (CE 2876-2).
- C. The owner or operator shall develop an operating and maintenance plan for the Regenerative Thermal Oxidizer with Duct Washing System and Cyclonic Separator (CE 2876-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- D. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Regenerative Thermal Oxidizer with Duct Washing System and Cyclonic Separator (CE 2876-2).

- E. The pH range of the liquid in Duct Washing System and Cyclonic Separator shall be maintained between 5 and 8.
- i. The owner or operator shall properly operate and maintain equipment to monitor the liquid pH used in Duct Washing System and Cyclonic Separator. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the liquid pH used in Duct Washing System and Cyclonic Separator, on a continuous basis. If the pH of the liquid in Duct Washing System and Cyclonic Separator falls outside the range specified in Condition 5E, the owner or operator shall investigate Duct Washing System and Cyclonic Separator and make corrections to Duct Washing System and Cyclonic Separator. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Duct Washing System and Cyclonic Separator is not in operation.
- F. The total liquid flowrate use in the recirculating Duct Washing System shall be maintained at or above 110 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquid flow rate used in the recirculating Duct Washing System. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquid flow rate used in the recirculating Duct Washing System, in gallons per minute, continuously. If the total liquid flow rate to the recirculating Duct Washing System falls below the value specified in Condition 5F, the owner or operator shall investigate the Duct Washing System and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Duct Washing System is not in operation.
- G. The owner or operator shall only bypass Regenerative Thermal Oxidizer (CE 2876-2) for purposes of malfunction and/or maintenance for a maximum of 200 hours per twelve month rolling period.
- i. The owner or operator shall record the total hours and the cause of Regenerative Thermal Oxidizer (CE 2876-2) bypass on a monthly basis. The owner or operator shall calculate and record the rolling 12-month totals.
- H. The owner or operator shall develop an operating and maintenance plan for Pulse Jet Baghouse (CE2805-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE2805-2).

- I. The owner or operator shall rescind the applicable air construction permits associated with the equipment specified in Table 1 within 30-days after completion of the Expeller Building Aspiration Project.

Table 1: Equipment List

Emission Unit Description	EP ID	Permit No.
Expeller, Whole Germ Receiving	EP098.0	74-A-016-S4
Seventeen Expellers for Spent Germ Hulls	EP545.0	06-A-1261-S2

Authority for Requirement: DNR Construction Permit 21-A-311

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 135

Stack Opening (inches, dia.): 56

Exhaust Flowrate (scfm): 11,900

Exhaust Temperature (°F): 320

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 21-A-311

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing – EP 557.0

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5} ⁽¹⁾	Performance Test	Once Every Three Calendar Years ⁽²⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀ ⁽¹⁾	Performance Test	Once Every Three Calendar Years ⁽²⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Test	Once Every Three Calendar Years ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
SO ₂	Performance Test	Once Every Three Calendar Years ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	Performance Test	Once Every Three Calendar Years ⁽²⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

⁽¹⁾Performance testing may be conducted for total particulate matter to demonstrate compliance with PM₁₀ and PM_{2.5} limits.

⁽²⁾Performance testing for PM, PM₁₀, PM_{2.5}, SO₂, and VOC shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with PM, PM₁₀, PM_{2.5}, SO₂, and VOC emission limits, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, PM_{2.5}, SO₂, and VOC.

Authority for Requirement: DNR Construction Permit 21-A-311

Stack Testing - Expellers #7 – 12, 14, 16, and 17

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State (3)	Performance Test	One Time	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽³⁾Performance testing shall be conducted for total particulate matter (PM) at the stack (EP557.0) to demonstrate compliance with PM limit as specified in permit condition 1c. Compliance with limit may be demonstrated by measuring the outlet particulate matter concentration from EP557.0 while all equipment specified in condition 3 are in operation.

Authority for Requirement: DNR Construction Permit 21-A-311

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 380.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1287.0	Old Gluten Day Bin	Gluten	8.83 tons of gluten/hr from dryers, load-in rate	Pulse Jet Baghouse (CE1213-2)
			67.5 tons of gluten/hr from bucket elevator, load-in rate	

⁽¹⁾ Maximum rated capacity of GP1 and GP2 dryers is 11.95 tons gluten per hour.

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 21-A-159-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.030 lb/hr

Authority for Requirement: DNR Construction Permit 21-A-159-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.14 lb/hr

Authority for Requirement: DNR Construction Permit 21-A-159-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.14 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 21-A-159-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.16 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 21-A-159-S1

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The differential pressure drop across the Pulse Jet Baghouse (CE1213-2) shall be maintained between 0.1 and 4 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE1213-2). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per a written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE1213-2), in inches of water, at least once per shift. If the pressure drop across the Pulse Jet Baghouse (CE1213-2) falls outside the range specified in Condition 5.A., the owner or operator shall investigate the Pulse Jet Baghouse (CE1213-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE1213-2) is not in operation.
- B. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1213-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE1213-2).

Authority for Requirement: DNR Construction Permit 21-A-159-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 43
Stack Opening (inches, dia.): 13.25
Exhaust Flowrate (scfm): 2,425
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 21-A-159-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table 1: GP1 Gluten Filters

Associated Equipment

Table 1: GP1 Gluten Filters

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (tons/hr)	Construction Permit
268.0	1250.0	GP1: Gluten Filter No. 1	Gluten	0.86	15-A-203
269.0	1251.0	GP1: Gluten Filter No. 2	Gluten	0.86	15-A-204
270.0	1252.0	GP1: Gluten Filter No. 3	Gluten	0.86	15-A-205
271.0	1253.0	GP1: Gluten Filter No. 4	Gluten	0.86	15-A-206
272.0	1254.0	GP1: Gluten Filter No. 5	Gluten	0.86	15-A-207
325.0	1255.6	GP1: Gluten Filter No. 6	Gluten	0.86	22-A-069
	1255.7	GP1: Gluten Filter No. 7	Gluten	0.86	
326.0	1255.8	GP1: Gluten Filter No. 8	Gluten	0.86	22-A-070
	1255.9	GP1: Gluten Filter No. 9	Gluten	0.86	

Applicable Requirements

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

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

Emission Points 268.0, 269.0, 270.0, 271.0, 272.0

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.067 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permits 15-A-203, 15-A-204, 15-A-205, 15-A-206, 15-A-207
567 IAC 23.3(3)"e"

Emission Points 325.0, 326.0

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.15 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permits 22-A-069, 22-A-070
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

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

Emission Points 325.0 and 326.0

- A. This permit establishes no operating limits, monitoring or recordkeeping requirements for these emissions units.
- B. No later than 30 days after the startup of operation of emission points EP325.0 and EP326.0, the owner or operator shall permanently cease operation of emission points EP283.0, EP284.0, EP285.0 and EP286.0 and shall submit a request to the Department to rescind construction permits 15-A-480, 15-A-481, 15-A-482, and 15-A-483.

Authority for Requirement: DNR Construction Permits 22-A-069, 22-A-070

Emission Point Characteristics

The emission points shall conform to the conditions listed in Table 2: GP1 Gluten Filters.

Table 2: GP1 Gluten Filters

Emission Point Number	Emission Unit Number	Stack Height (ft, from the ground)	Stack Opening (inches, dia.)	Exhaust Flowrate (scfm)	Exhaust Temperature (F)	Discharge Style
268.0	1250.0	30	10.5	4,170	73	Horizontal
269.0	1251.0	40	10.5	4,170	73	Horizontal
270.0	1252.0	30	10.5	4,170	73	Horizontal
271.0	1253.0	40	10.5	4,170	73	Horizontal
272.0	1254.0	39.5	10.5	4,170	73	Horizontal
325.0	1255.6	49.5	24.0	9,600	73	Vertical Unobstructed
	1255.7					
326.0	1255.8	61.50	24.0	9,600	73	Vertical Unobstructed
	1255.9					

Authority for Requirement: DNR Construction Permits specified in Table 1: GP1 Gluten Filters

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table 1: GP2 Gluten Filters

Associated Equipment

Table 1: GP2 Gluten Filters

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (tons/hr)	Construction Permit
312.0	1281.1, 1281.4	GP2: Gluten Filter #1, Gluten Filter #4	Gluten	0.86 each	15-A-484
313.0	1282.2, 1281.3	GP2: Gluten Filter #2, Gluten Filter #3	Gluten	0.86 each	15-A-485
314.0	1281.5, 1281.6, 1281.7, 1281.8	GP2: Gluten Filter #5, Gluten Filter #6, Gluten Filter #7, Gluten Filter #8	Gluten	0.86 each	15-A-486-S1

Applicable Requirements

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

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

Emission Points 312.0 and 313.0

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.134 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permits 15-A-484, 15-A-485
567 IAC 23.3(3)"e"

Emission Point 314.0

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.27 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permit 15-A-486-S1
567 IAC 23.3(3)"e"

Emission Point Characteristics

The emission points shall conform to the conditions listed in Table 2: GP2 Gluten Filters.

Table 2: GP2 Gluten Filters

Emission Point Number	Emission Unit Number	Stack Height (ft, from the ground)	Stack Opening (inches, dia.)	Exhaust Flowrate (scfm)	Exhaust Temperature (F)	Discharge Style
312.0	1281.1, 1281.4	39	24	5,430	81	Horizontal
313.0	1282.2, 1281.3	39	24	5,430	81	Horizontal
314.0	1281.5, 1281.6, 1281.7, 1281.8	65	24	5,430	81	Horizontal

Authority for Requirement: DNR Construction Permits specified in Table 1: GP2 Gluten Filters

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 174.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1245.0	GP2, #4 Gluten Pre-Mill Cooling System	Corn Gluten	6.13 tons of dried gluten per hour	GP2, Product Baghouse (CE1245-1)
1246.0	GP2, #4 Gluten Mill		6.13 tons of dried gluten per hour	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 91-A-068-S3
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.150 lb/hr

Authority for Requirement: DNR Construction Permit 91-A-068-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.41 lb/hr

Authority for Requirement: DNR Construction Permit 91-A-068-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.41 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 91-A-068-S3
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.37 lb/hr, 10.0 ppmv,d (RACT limit) ⁽²⁾

Authority for Requirement: DNR Construction Permit 91-A-068-S3
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 15.0 ppmv,d⁽²⁾
Authority for Requirement: DNR Construction Permit 91-A-068-S3

⁽²⁾ As required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The pressure drop across GP2, Product Baghouse (CE1245-1) shall be maintained between 0.1 to 10 inches of water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the GP2, Product Baghouse (CE1245-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the GP2, Product Baghouse (CE1245-1), in inches of water, once per calendar day. If the pressure drop across the GP2, Product Baghouse (CE1245-1) falls outside the range specified in Condition 5A, the owner or operator shall investigate the Impingent Wet Scrubber (CE1244-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP2, Product Baghouse (CE1245-1) is not in operation.
- B. The owner or operator shall develop an operating and maintenance plan for GP2, Product Baghouse (CE1245-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP2, Product Baghouse (CE1245-1).

Authority for Requirement: DNR Construction Permit 91-A-068-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 82
Stack Opening, (inches, dia.): 18
Exhaust Flow Rate (scfm): 8,295
Exhaust Temperature (°F): 115
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 91-A-068-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 531.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1260.0	Gluten Plant 1 Pneumatic Transport System	Corn Gluten	5.1 tons dried gluten per hour	Pulse Jet Baghouse (CE1260-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 03-A-471-S3
567C 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.122 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-471-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.42 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-471-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.42 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 03-A-471-S3
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.10 lb/hr (RACT limit), 500 ppmv

Authority for Requirement: DNR Construction Permit 03-A-471-S3
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The differential pressure drop across Pulse Jet Baghouse (CE1260-1) shall be maintained between 0.3 and 6 inches of water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Pulse Jet Baghouse (CE1260-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Pulse Jet Baghouse (CE1260-1), in inches of water, continuously. If the pressure drop across Pulse Jet Baghouse (CE1260-1) falls outside the range specified in Condition 5A, the owner or operator shall investigate Pulse Jet Baghouse (CE1260-1) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Pulse Jet Baghouse (CE1260-1) are not in operation.
- B. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1260-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Pulse Jet Baghouse (CE1260-1).

Authority for Requirement: DNR Construction Permit 03-A-471-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 60
Stack Opening (inches, dia.): 24
Exhaust Flowrate (scfm): 10,300
Exhaust Temperature (°F): 120
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-471-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 319.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1275.0	Railcar Loading: Gluten	Gluten	67.5 tons of gluten per hour, load-out rate	Pulse Jet Baghouse (CE1288-1)
1247.0	Gluten Plant 2 Pneumatic Transport System	Gluten	6.13 tons of gluten per hour (process design capacity) ⁽¹⁾	

⁽¹⁾ Maximum rated capacity is 6.85 tons gluten per hour.

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-136-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-136-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-136-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.17 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-136-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.10 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 18-A-136-S2
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The owner or operator shall operate the Gluten Railcar Loading (EU1275.0) in a manner to ensure that particulate emissions generated during gluten railcar loading are captured and vented to the Pulse Jet Baghouse (CE 1288-1)
 - i. The owner or operator shall check for the presence of visible emissions from the Gluten Railcar Loading area (EU1275.0) once per calendar day. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions during gluten railcar loading. If the owner or operator observes visible emissions during gluten railcar loading, the owner or operator shall investigate the emission unit, the control equipment or the operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Gluten Railcar Loading (EU1275.0) is not in operation.
- B. The differential pressure drop across Pulse Jet Baghouse (CE1288-1) shall be maintained between 0.3 and 6 inches of water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Pulse Jet Baghouse (CE1288-1). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per a written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Pulse Jet Baghouse (CE1288-1), in inches of water, at least once per day. If the pressure drop across Pulse Jet Baghouse (CE1288-1) falls outside the range specified in Condition 5.B., the owner or operator shall investigate the Pulse Jet Baghouse (CE1288-1) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE1288-1) is not in operation.
- C. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1288-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE1288-1).

D. The owner or operator shall rescind air construction permit 16-A-037, Gluten Railcar Loading within 30 days after completion of the gluten railcar loading project.

Authority for Requirement: DNR Construction Permit 18-A-136-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 90

Stack Opening (inches): 14

Exhaust Flow Rate (scfm): 4,150

Exhaust Temperature (°F): 68

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 18-A-136-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 319.1

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
EU1288.0	#1 Gluten Day Bin	Gluten	8.83 tons of gluten per hour from dryers, load-in rate ⁽¹⁾	Bin Vent Filter (CE1288-2)
			67.5 tons of gluten per hour from bucket elevator, load-in rate	

⁽¹⁾ Maximum rated capacity of GP1 and GP2 dryers is 11.95 tons gluten per hour.

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 18-A-158-S1
568 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.0043 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-158-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.0043 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-158-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.0043 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-158-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.001 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 18-A-158-S1
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE1288-2) once per day at a time while the #1 Gluten Day Bin (EU1288.0) is being filled with gluten.
 - i. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE1288-2), the owner or operator shall investigate the emission unit, the control equipment, or operations associated with the emission unit and shall make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the #1 Gluten Day Bin (EU1288.0) is not being filled with gluten.
- B. The owner or operator shall develop an operating and maintenance plan for the Bin Vent Filter (CE1288-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Bin Vent Filter (CE1288-2).

Authority for Requirement: DNR Construction Permit 18-A-158-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height (ft, from the ground): 50
- Stack Opening (inches): 8 x 8
- Exhaust Flow Rate (scfm): 50
- Exhaust Temperature (°F): 92
- Discharge Style: Downward
- Authority for Requirement: DNR Construction Permit 18-A-158-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing:

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
Opacity	Performance Testing ⁽¹⁾	Initial	1 hour	40 CFR 60, Appendix A, Method 9

⁽¹⁾ The total duration of the Method 9 observations shall be 1 hour for this emission point. The owner or operator shall conduct visible observation when the #1 Gluten Day Bin (EU 1288.0) is being filled with gluten.

Authority for Requirement: DNR Construction Permit 18-A-158-S1

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 195.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1262.0	Dryer House 4, Spent Germ Receiving	Dry Germ	8.0 tons/hr	Fabric Filter Baghouse (CE1262-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 09-A-482-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.028 lb/hr

Authority for Requirement: DNR Construction Permit 09-A-482-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.10 lb/hr

Authority for Requirement: DNR Construction Permit 09-A-482-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.10 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 09-A-482-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.012 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permit 09-A-482-S2
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The baghouse's (CE1262-1) differential pressure drop shall be maintained between 0.1 and 4 inches water column.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the baghouse (CE1262-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall develop an operating and maintenance plan for the baghouse (CE1262-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

Reporting & Record keeping

- A. The owner or operator shall collect and record the pressure drop across the baghouse (CE1262-1), in inches of water, at least once per day. If the pressure drop across the baghouse (CE1262-1) falls outside the range specified in Operating Limits condition A. above, the owner or operator shall investigate the baghouse (CE1262-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the baghouse (CE1262-1) is not in operation.
- B. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the control equipment.

Authority for Requirement: DNR Construction Permit 09-A-482-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 66.5
Stack Opening (inches, dia.): 12
Exhaust Flowrate (scfm): 1,200
Exhaust Temperature (°F): 120
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 09-A-482-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Pollutant	Compliance Demonstration	Compliance Methodology	Frequency
SO ₂	Yes	Stack Test	One Time

Authority for Requirement: DNR Construction Permit 09-A-482-S2

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 546.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1264.0	#1 Alpha Laval Centrifuge in Dryer House 4	Whole Stillage	500 gal/min	None

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-338-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.0003 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-338-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.001 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-338-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.10 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-338-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.0034 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permit 11-A-338-S1
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 5.72 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-338-S1

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The #4 Sharples shall be permanently shut down no later than six months after the start-up of the DH4, #1 Alpha Laval.

Reporting & Record keeping

- A. Maintain a record of the date the DH4, #3 Alpha Laval starts operations and the date the #4 Sharples ceases operation.

Authority for Requirement: DNR Construction Permit 11-A-338-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 25

Stack Opening (inches, dia.): 6

Exhaust Flowrate (scfm): ⁽¹⁾

Exhaust Temperature (°F): 92

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 11-A-338-S1

⁽¹⁾ Velocity pressure below detection level of 0.005 inches of water column. Stack modeled with exit velocity of 0.001 m/s.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 551.0

Associated Equipment

Table: West Thin Stillage Tank and West C-400 Thrus Tank

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Receiving Tank
1264.8	DH4, #6 Sharples Centrifuge	Stillage	300 gal/min	West Thin Stillage Tank
1264.9	DH4, #7 Sharples Centrifuge		300 gal/min	
1265.5	DH4, #5 C-400 Centrifuge		80 gal/min	West C-400 Thrus Tank
1265.6	DH4, #6 C-400 Centrifuge		80 gal/min	
1265.7	DH4, #7 C-400 Centrifuge		80 gal/min	
1265.8	DH4, #8 C-400 Centrifuge		80 gal/min	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 15-A-354-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.011 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-354-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.011 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-354-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.011 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 15-A-354-S1,
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.0840 lb/hr (RACT limit); 500 ppmv
Authority for Requirement: DNR Construction Permit 15-A-354-S1
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 5.72 lb/hr
Authority for Requirement: DNR Construction Permit 15-A-354-S1

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 69
Stack Opening (inches, dia.): 6
Exhaust Flowrate (scfm): 189
Exhaust Temperature (°F): 200
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 15-A-354-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 196.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1263.0	DH4 and DH5 Rotary Dryers' Product Receiver Cyclone	Dry Feed	52.8 tons of dry feed per hour	DHWHSE Bypass Baghouse (CE1263-2)

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.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 10-A-563-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.175 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-563-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.61 lb/hr

Authority for Requirement: DNR Construction Permit 10-A-563-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.61 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 10-A-563-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.42 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permit 10-A-563-S2
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The Bypass Baghouse's (CE1263-2) differential pressure drop shall be maintained between 0.3 and 6 inches water column.
- B. The owner or operator shall properly operate and maintain equipment to continuously monitor the differential pressure drop across the Bypass Baghouse (CE1263-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall collect and record the pressure drop across the Bypass Baghouse (CE1263-2), in inches of water, continuously. If the pressure drop across the Bypass Baghouse (CE1263-2) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Bypass Baghouse (CE1263-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Bypass Baghouse (CE1263-2) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Bypass Baghouse (CE1263-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bypass Baghouse (CE1263-2).

Authority for Requirement: DNR Construction Permit 10-A-563-S2

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 82.67
Stack Opening (inches, dia.): 22
Exhaust Flowrate (scfm): 11,672
Exhaust Temperature (°F): 113
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 10-A-563-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 311.0

Associated Equipment

Table: Dryer House 4 Rotary Dryers

Emission Unit Number	Emission Unit Description	Control Equipment	
1236.0	DH4 Rotary Dryer #5	Expansion Chamber (CE1236-1)	TurboTak Spray Chamber Scrubber (CE1236-2)
1238.0	DH4 Rotary Dryer #6	Expansion Chamber (CE1238-1)	
1241.0	DH4 Rotary Dryer #7	Expansion Chamber (CE1241-1)	
1282.0	Hulls Surry Tank Vent	Spray Chamber Scrubber (CE1282-1)	
1285.0	East Thin Stillage Tank Vent		
1285.1	West Thin Stillage Tank		
1285.2	West C-400's Thrus Tank		
1285.3	East C-400's Thrus Tank (Now Oil Tank)		
1285.4	R-2639-Emergency Syrup Tank		
1283.0	12-B Whole Stillage Tank Vent		
1284.1	MR2 Feed Tank		
1284.2	MR2 Condensate Tank Vent		
1284.3	MR2 Non Condensibles Vent		
1264.0	#1 Alfa-Laval Decanter Centrifuge		
1264.8	ME-1204-R2662-#6 Sharples Decanter Centrifuge		
1264.9	ME-1204-R2663-#7 Sharples Decanter Centrifuge		
1286.0	DH4 Conveyors: Spent Germ Conveyor, Dry Ingredients Conveyor, Dry Ingredients Drag, #3 & #4 Sharples Discharge Screw Conveyors, #5 Rotary Product Conveyors #1 & 2, #7 & #8 C-400 Discharge Conveyors, #7 & #8 C-400 Cross Conveyors, Combined Feed Collection Conveyor, Inclined Mixing Conveyor, #5, #6 & #7 Rotaries Feed Conveyors, Overflow Drag #1, Rework Conveyors #1 & #2, #5, Combined Rotaries Product Conveyors #1 & #2, DH4 Mill Feed Draver Conveyor		

Regenerative Thermal Oxidizer (CE1236-3), Maximum Heat Input: 12.0 MMBtu/hr with Low NOx Burners

Table: Dryer House 4 Rotary Dryers Maximum Rated Capacities

Emission Unit Number	Emission Unit Description	Maximum Rated Capacity
1236.0	Dryer House 4, Rotary Dryer #5	4.25 tons of dried feed per hour
1238.0	Dryer House 4, Rotary Dryer #6	6.65 tons of dried feed per hour
1241.0	Dryer House 4, Rotary Dryer #7	6.65 tons of dried feed per hour
See Table: Dryer House 4 Rotary Dryers for emission unit list	Dryer House 4 Building Aspiration System	17.55 tons of dried feed per hour

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 15-A-213-S3
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 4.30 lb/hr ⁽²⁾

Authority for Requirement: DNR Construction Permit 15-A-213-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 5.7 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-213-S3

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 5.7 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 15-A-213-S3
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.10 lb/hr (RACT limit); 90% Control Efficiency or 10 ppm_{v,d} ^{(2) (3)}

Authority for Requirement: DNR Construction Permit 15-A-213-S3

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 98% Control Efficiency or 10 ppm_{v,d} ^{(2) (4)}

Authority for Requirement: DNR Construction Permit 15-A-213-S3

⁽²⁾The limit for PM_{2.5}, SO₂ and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

⁽³⁾Limit requires 90 percent control efficiency across Spray Chamber Scrubber (CE1236-2) and Spray Chamber Scrubber (CE1282-1) or SO₂ concentration of 10 ppm_{v,d} from the outlet of EP311.0. Compliance with limit shall be demonstrated by measuring the SO₂ concentration of the inlet and outlet and flowrate of Spray Chamber Scrubber (CE1236-2) and Spray Chamber Scrubber (CE1282-1) to determine control efficiency of each scrubber or measuring the outlet SO₂ concentration from EP311.0. Control efficiency is defined as
$$\left[\frac{\text{inlet mass rate} - \text{outlet mass rate}}{\text{inlet mass rate}} \right] \times 100.$$

⁽⁴⁾Limit requires 98 percent control efficiency across Regenerative Thermal Oxidizer (CE1236-3) or VOC concentration of 10 ppm_{v,d} from the outlet of EP311.0. Compliance with limit shall be demonstrated by measuring the inlet and outlet VOC concentration and flowrate of Regenerative Thermal Oxidizer (CE1236-3) to determine control efficiency of Regenerative Thermal Oxidizer (CE1236-3) or measuring the outlet VOC concentration from EP311.0. Control efficiency is defined as
$$\left[\frac{\text{inlet mass rate} - \text{outlet mass rate}}{\text{inlet mass rate}} \right] \times 100.$$

Other Emission Limits

For DH4 Feed Dryer #5, EU1236.0

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 1.41 lb/hr (LAER limit)

Authority for Requirement: DNR Construction Permit 15-A-213-S3
567 IAC 31.20(1)"d"

For DH4 Feed Dryer #6, EU1238.0

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 0.1 gr/scf (LAER limit)

Authority for Requirement: DNR Construction Permit 15-A-213-S3
567 IAC 31.20(1)"d"

For DH4 Feed Dryer #7, EU1241.0

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 1.60 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-213-S3

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

DH4, Rotary Dryer #5 (EU 1236.0)

- A. The capacity of the DH4, Rotary Dryer #5 (EU 1236.0) is limited to 4.25 tons per hour of dry product.
- B. The #5 Rotary Dryer Stub Feeder Conveyor speed shall not exceed 28.9 revolutions per minute (rpm) on a one (1) hour average.
 - i. The owner or operator shall properly operate and maintain equipment to continuously monitor the #5 Rotary Dryer Stub Feeder Conveyor motor speed. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and calculate the #5 Rotary Dryer Stub Feeder Conveyor speed, in revolutions per minute, continuously. This requirement shall not apply on the days that DH4, Rotary Dryer #5 is not in operation.
 - iii. The owner or operator shall determine and track the hourly average #5 Rotary Dryer Stub Feeder Conveyor speed in revolutions per minute.

Control Equipment-Scrubbers

- C. The Spray Chamber Scrubber (CE1236-2) total liquor flowrate shall be maintained at or above 55 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE1236-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE1236-2), in gallons per minute, continuously. If the total liquor flow rate to the Spray Chamber Scrubber (CE1236-2) falls below the value specified in Condition 5C, the owner or operator shall investigate the Spray Chamber Scrubber (CE1236-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE1236-2) is not in operation.

- D. The pH range of the scrubbing liquor in Spray Chamber Scrubber (CE1236-2) shall be maintained between 5 and 8.
- i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the Spray Chamber Scrubber (CE1236-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the scrubbing liquor pH in Spray Chamber Scrubber (CE1236-2), on a continuous basis. If the pH of the scrubbing liquor in Spray Chamber Scrubber (CE1236-2) falls outside the range specified in Condition 5D, the owner or operator shall investigate Spray Chamber Scrubber (CE1236-2) and make corrections to Spray Chamber Scrubber (CE1236-2). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Spray Chamber Scrubber (CE1236-2) is not in operation.
- E. The Spray Chamber Scrubber (CE1282-1) total liquor flowrate shall be maintained at or above 165 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Spray Chamber Scrubber (CE1282-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE1282-1), in gallons per minute, continuously. If the total liquor flow rate to the Spray Chamber Scrubber (CE1282-1) falls below the value specified in Condition 5E, the owner or operator shall investigate the Spray Chamber Scrubber (CE1282-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE1282-1) is not in operation.
- F. The pressure drop across Spray Chamber Scrubber (CE1282-1) shall be maintained between 0.1 to 5 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Spray Chamber Scrubber (CE1282-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the pressure drop across the Spray Chamber Scrubber (CE1282-1), in inches of water, continuously. If the pressure drop across the Spray Chamber Scrubber (CE1282-1) falls outside the range specified in Condition 5F, the owner or operator shall investigate the Spray Chamber Scrubber (CE1282-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE1282-1) is not in operation.
- G. The pH range of the scrubbing liquor in Spray Chamber Scrubber (CE1282-1) shall be maintained between 5 and 8.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the Spray Chamber Scrubber (CE1282-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the scrubbing liquor pH in Spray Chamber Scrubber (CE1282-1), on a continuous basis. If the pH of the scrubbing liquor in Spray Chamber Scrubber (CE1282-1) falls outside the range specified in Condition 5G, the owner or operator shall investigate Spray Chamber Scrubber (CE1282-1) and make corrections to Spray Chamber Scrubber (CE1282-1). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Spray Chamber Scrubber (CE1282-1) is not in operation.
- H. The owner or operator shall develop an operating and maintenance plan for Spray Chamber Scrubber (CE1236-2) and Spray Chamber Scrubber (CE1282-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Spray Chamber Scrubber (CE1236-2).
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Spray Chamber Scrubber (CE1282-1).

Control Equipment-RTO

- I. The owner or operator shall only bypass Regenerative Thermal Oxidizer (CE1236-3) for purposes of malfunction and/or maintenance for a maximum of 200 hours per twelve month rolling period.
 - i. The owner or operator shall record the total hours and the cause of Regenerative Thermal Oxidizer (CE1236-3) bypass on a monthly basis. The owner or operator shall calculate and record the rolling 12-month totals.

- J. The owner or operator shall maintain a Regenerative Thermal Oxidizer (CE1236-3) combustion chamber temperature to no less than 1680 degrees Fahrenheit based on a 3-hour block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the chamber temperature of Regenerative Thermal Oxidizer (CE1236-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the combustion chamber temperature of Regenerative Thermal Oxidizer (CE1236-3), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of Regenerative Thermal Oxidizer (CE1236-3) falls below the value specified in Condition 5J, the owner or operator shall investigate Regenerative Thermal Oxidizer (CE1236-3) and make corrections Regenerative Thermal Oxidizer (CE1236-3). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Regenerative Thermal Oxidizer (CE1236-3) is not in operation.
- K. The owner or operator shall combust only natural gas or process off-gasses in Regenerative Thermal Oxidizer (CE1236-3).
- L. The owner or operator shall develop an operating and maintenance plan for the Regenerative Thermal Oxidizer (CE1236-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Regenerative Thermal Oxidizer (CE1236-3).

Authority for Requirement: DNR Construction Permit 15-A-213-S3

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 110

Stack Opening (inches, dia.): 64

Exhaust Flowrate (scfm): 34,530

Exhaust Temperature (°F): 333

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 15-A-213-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5} ⁽³⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀ ⁽²⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
SO ₂	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	Performance Testing	Once per Calendar Year ^{(4) (5)}	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

- (1) Performance testing for PM, PM₁₀, PM_{2.5}, and SO₂ shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with PM, PM₁₀, PM_{2.5}, and SO₂ emission limits as specified in condition 1a, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, PM_{2.5}, and SO₂. The next performance test for PM, PM₁₀, PM_{2.5}, and SO₂ shall be completed by December 31, 2023.
- (2) Performance testing may be conducted for total particulate matter to demonstrate compliance with PM₁₀ limit as specified in permit condition 1a.
- (3) If performance testing using methods specified in 40 CFR 51, Appendix M, 201A with 202 are not performed due high moisture content (stack saturation) then the owner or operator shall demonstrate compliance with PM_{2.5} limit as specified in permit condition 1a by conducting methods specified in 40 CFR 60, Appendix A, Method 5 and 40 CFR 51 Appendix M Method 202. Utilizing Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried feed product (immediately following the feed dryers) to determine the PM_{2.5} fraction of the measured total filterable particulate. Utilizing Method 202, the measured condensable fraction shall be considered all PM_{2.5}.
- (4) Performance testing for VOC shall be conducted once per calendar year. After the completion of two consecutive performance tests that demonstrate compliance with VOC emission limits as specified in condition 1a, the owner or operator may request to modify the performance testing frequency for VOC.
- (5) As alternative, the owner or operator may elect to demonstrate RTO control efficiency using test method 40 CFR 60, Appendix A, Method 25A.

Authority for Requirement: DNR Construction Permit 15-A-213-S3

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 601.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1267.0	Dryer House 5 (DH5) Spent Germ Pneumatic Transport	Dry Germ	6.0 tons per hour of spent germ	Pulse Jet Baghouse (CE1267-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-340-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.10 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-340-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.10 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-340-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.10 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-340-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.05 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 11-A-340-S1
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.22 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-340-S1

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The differential pressure drop across the Pulse Jet Baghouse (CE1267-1) shall be maintained between 1 and 6 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE1267-1). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE1267-1), in inches of water, continuously. If the pressure drop across the Pulse Jet Baghouse (CE1267-1) falls outside the range specified in Condition 5.A., the owner or operator shall investigate the Pulse Jet Baghouse (CE1267-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE1267-1) is not in operation.
- B. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1267-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE1267-1).

Authority for Requirement: DNR Construction Permit 11-A-340-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 128
Stack Opening (inches, dia.): 17
Exhaust Flowrate (scfm): 1,642
Exhaust Temperature (°F): 86
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 11-A-340-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 603.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1269.0	Dryer House 5 (DH5) Mill Feed Receiving from Swiss Combi Dryer	Feed	35 tons per hour of feed	Pulse Jet Baghouse (CE1269-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-342-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.12 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-342-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.43 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-342-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.43 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-342-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.05 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 11-A-342-S2
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The differential pressure drop across the Pulse Jet Baghouse (CE1269-1) shall be maintained between 0.5 and 6 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE1269-1). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE1269-1), in inches of water, continuously. If the pressure drop across the Pulse Jet Baghouse (CE1269-1) falls outside the range specified in Condition 5.A., the owner or operator shall investigate the Pulse Jet Baghouse (CE1269-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE1269-1) is not in operation.
- B. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1269-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE1269-1).

Authority for Requirement: DNR Construction Permit 11-A-342-S2

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 128
Stack Opening (inches, dia.): 29
Exhaust Flowrate (scfm): 11,461
Exhaust Temperature (°F): 109
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 11-A-342-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 605.0

Associated Equipment

Table: DH5 Dewatering Building

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1278.0	#1 - #5 Alfa Laval Centrifuges	Stillage	400 gal/min per centrifuge, Maximum total stillage flow = 1600 gal/min	Packed Bed Scrubber (CE1278-1), Regenerative Thermal Oxidizer (CE1278-2), Maximum Heat Input: 1.5 MMBtu/hr with Low NOx Burners
1279.0	Thin Stillage Tank, Fiber Press Water Tank, Water Heat Evaporator Product Tank	Stillage	52,700 gallons, 32,100 gallons, 32,100 gallons, 140,000 Bushels/day equivalent	
1280.0	Decanter Discharge Screw Conveyor, Fiber Press Cake Conveyor, Blended Cake Transfer Screw Conveyor, Spent Germ and Dried Fiber Transfer Conveyor	Stillage, Decant, Dried Fiber, Spent Germ	140,000 bushels/day equivalent	
1281.0	#1 - #4 Fiber Dewatering Screw Press	Stillage	400 gal/min per press, Maximum total feed rate = 1200 gal/min (3 presses at any one time)	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 14-A-552-S2
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.36 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-552-S2

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.36 lb/hr
Authority for Requirement: DNR Construction Permit 14-A-552-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.36 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 14-A-552-S2

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 1.40 lb/hr; 500 ppmv
Authority for Requirement: DNR Construction Permit 14-A-552-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 98% Control Efficiency or 10 ppm_{v,d}
Authority for Requirement: DNR Construction Permit 14-A-552-S2

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Control Equipment-Scrubber

- A. The Packed Bed Scrubber (CE1278-1) total liquor flowrate shall be maintained at or above 85 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Packed Bed Scrubber (CE1278-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to the Packed Bed Scrubber (CE1278-1), in gallons per minute, continuously. If the total liquor flow rate to the Packed Bed Scrubber (CE1278-1) falls below the value specified in Condition 5A, the owner or operator shall investigate the Packed Bed Scrubber (CE1278-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE1278-1) is not in operation.

- B. The pressure drop across Packed Bed Scrubber (CE1278-1) shall be maintained between 1 to 6 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Packed Bed Scrubber (CE1278-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Packed Bed Scrubber (CE1278-1), in inches of water, continuously. If the pressure drop across the Packed Bed Scrubber (CE1278-1) falls outside the range specified in Condition 5B, the owner or operator shall investigate the Packed Bed Scrubber (CE1278-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE1278-1) is not in operation.
- C. The pH range of the scrubbing liquor in Packed Bed Scrubber (CE1278-1) shall be maintained between 6 and 10.
- i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the Packed Bed Scrubber (CE1278-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the scrubbing liquor pH in Packed Bed Scrubber (CE1278-1), on a continuous basis. If the pH of the scrubbing liquor in Packed Bed Scrubber (CE1278-1) falls outside the range specified in Condition 5C, the owner or operator shall investigate Packed Bed Scrubber (CE1278-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Packed Bed Scrubber (CE1278-1) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for Packed Bed Scrubber (CE1278-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Packed Bed Scrubber (CE1278-1).

Control Equipment-RTO

- E. The owner or operator shall only bypass the Regenerative Thermal Oxidizer (CE1278-2) for purposes of malfunction and/or maintenance for a maximum of 200 hours per twelve month rolling period.
 - i. The owner or operator shall record the total hours and the cause of Regenerative Thermal Oxidizer (CE1278-2) bypass on a monthly basis. The owner or operator shall calculate and record the rolling 12-month totals.
- F. The owner or operator shall maintain a Regenerative Thermal Oxidizer (CE1278-2) combustion chamber temperature of no less than 1600 degrees Fahrenheit based on a 3-hour block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the combustion chamber temperature of the Regenerative Thermal Oxidizer (CE1278-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the combustion chamber temperature of the Regenerative Thermal Oxidizer (CE1278-2), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of the Regenerative Thermal Oxidizer (CE1278-2) falls below the value specified in Condition 5F, the owner or operator shall investigate the Regenerative Thermal Oxidizer (CE1278-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Regenerative Thermal Oxidizer (CE1278-2) is not in operation.
- G. The owner or operator shall combust only natural gas or process off-gasses in the Regenerative Thermal Oxidizer (CE1278-2).
- H. The owner or operator shall develop an operating and maintenance plan for the Regenerative Thermal Oxidizer (CE1278-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Regenerative Thermal Oxidizer (CE1278-2).

Authority for Requirement: DNR Construction Permit 14-A-552-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 145

Stack Opening (inches, dia.): 40

Exhaust Flow Rate (scfm): 8,900

Exhaust Temperature (°F): 275

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 14-A-552-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5} ⁽²⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀ ⁽²⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
SO ₂	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 6C
VOC	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

⁽¹⁾ Performance testing for PM, PM₁₀, PM_{2.5}, SO₂, and VOC shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with PM, PM₁₀, PM_{2.5}, SO₂, VOC emission limits as specified in condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, PM_{2.5}, SO₂, and VOC.

⁽²⁾ Performance testing may be conducted for total particulate matter to demonstrate compliance with PM₁₀ and PM_{2.5} limits as specified in permit condition 1.

Authority for Requirement: DNR Construction Permit 14-A-552-S2

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 600.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1266.0	Dryer House 5 (DH5) Swiss Combi Dryer with Product Cooler and Product Recovery Cyclones	Dried Feed	35.24 tons per hour of dried feed	Spray Chamber Scrubber (CE1266-1), Thermal Oxidizer (CE1266-2), Vacuum Evaporator (CE1266-3)
	Dryer Burner	Natural Gas/Biogas	100 MMBTU per hour maximum heat input; 98,039 scfh (natural gas); 42,000 scfh (biogas)	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-339-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 2.70 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-339-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 7.0 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-339-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 7.0 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-339-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 4.86 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 11-A-339-S1, 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
 Emission Limit(s): 8.80 lb/hr
 Authority for Requirement: DNR Construction Permit 11-A-339-S1

Pollutant: Volatile Organic Compounds (VOC)
 Emission Limit(s): 9.52 lb/hr
 Authority for Requirement: DNR Construction Permit 11-A-339-S1

Pollutant: Carbon Monoxide (CO)
 Emission Limit(s): 13.44 lb/hr
 Authority for Requirement: DNR Construction Permit 11-A-339-S1

New Source Performance Standards (NSPS)

The following subparts apply to the emission unit(s) in this permit:

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
1266.0	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	Dc	Small Industrial-Commercial-Institutional Steam Generating Units	NA	23.1(2)"III"	§60.40c – §60.48c

Note: The dryer is heated indirectly by steam which is produced by burning natural gas, biogas and the organics released from the dryer. The dryer and the burner exhaust through a common stack. Per 40 CFR §60.40c(e), only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart.

NESHAP

This source is subject to 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, and Institutional Boilers and Process Heaters. See Appendix A for rule text.
 Authority for Requirement: 40 CFR 63 Subpart DDDDD

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The DH5 Swiss Combi Dryer’s (EU1266.0) burner / thermal oxidizer shall combust only natural gas, biogas, or natural gas and biogas together. Prior to burning any other fuels in this unit, the owner or operator shall obtain a permit modification from the IDNR, Air Quality Bureau. The burner/ thermal oxidizer shall also be used to burn process off-gases.
 - i. Per 40 CFR §60.48c(g)(1), the owner or operator shall record and maintain records of the amount of each fuel combusted during each operating day in the affected facility. As an alternative, as provided in 40 CFR §60.48c(g)(2) and (3), the owner

or operator may elect to either:

- a. Record and maintain records of the amount of each fuel combusted during each calendar month; or,
 - b. Record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.
- B. The biogas combusted in the burner shall have a maximum hydrogen sulfide concentration of 50 ppm_v, as measured on a 24-hour rolling average basis.
- i. The owner or operator shall record the 24-hour rolling average hydrogen sulfide concentration of the biogas combusted in the DH5 Swiss Combi Dryer (EU1266.0). This requirement shall only apply when the dryer is combusting biogas.
- C. The total flowrate of the Spray Chamber Scrubber (CE1266-1) liquor shall be maintained at or above 2,900 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flowrate to the Spray Chamber Scrubber (CE1266-1). The monitoring devices and any records shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall continuously collect and record the total liquor flow rate to the Spray Chamber Scrubber (CE1266-1), in gallons per minute. If the liquor flowrate to the Spray Chamber Scrubber (CE1266-1) falls below the value specified in Condition 5.C., the owner or operator shall investigate the Spray Chamber Scrubber (CE1266-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE1266-1) is not in operation.
- D. The pH range of the scrubbing liquor in the Spray Chamber Scrubber (CE1266-1) shall be maintained between 6 and 9.
- i. The owner or operator shall properly operate and maintain equipment to monitor the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE1266-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE1266-1), in standard units, on a daily basis. If the pH of the scrubbing liquor in the Spray Chamber Scrubber (CE1266-1) falls outside the range specified in Condition 5.D., the owner or operator shall investigate the Spray Chamber Scrubber (CE1266-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Spray Chamber Scrubber (CE1266-1) is not in operation.

- E. The DH5 Swiss Combi Dryer's burner / Thermal Oxidizer (CE 1266-2) shall maintain a minimum operating temperature (3-hour block average) of 1,600 degrees Fahrenheit as measured at the exit of the combustion chamber.
- i. The owner or operator shall properly operate and maintain equipment to monitor the operating temperature of the Thermal Oxidizer (CE1266-2). The monitoring devices and any records shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the combustion chamber temperature of the Thermal Oxidizer (CE1266-2), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of the Thermal Oxidizer (CE1266-2) falls below the value specified in Condition 5.E., the owner or operator shall investigate the Thermal Oxidizer (CE1266-2) and make corrections to the Thermal Oxidizer (CE1266-2). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Thermal Oxidizer (CE1266-2) is not in operation.
- F. The owner or operator shall tune up the DH5 Swiss Combi Dryer's burner/ Thermal Oxidizer (CE1266-2) on an annual basis. The annual tune-up shall include at a minimum:
- i. Burner inspection. Clean and replace any components, as necessary.
 - ii. Flame inspection. Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with the manufacturer's specifications.
 - iii. Air-to-fuel ratio control system. Inspect the system and ensure that the system is calibrated and functioning properly
 - iv. Optimize emissions. Optimize CO and NOx emissions consistent with the manufacturer's specifications.
 - v. Maintain on-site and submit, if requested by the Department, a report containing the following information: the date of the tune-up, and a description of any corrective actions taken as part of the tune-up of the burner.
- G. The owner or operator shall develop an operating and maintenance plan for the Spray Chamber Scrubber (CE1266-1) and for the Thermal Oxidizer (CE1266-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Spray Chamber Scrubber (CE1266-1) and the Thermal Oxidizer (CE1266-2).

- H. The owner or operator shall develop an operating and maintenance plan for the Vacuum Evaporator (CE1266-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Vacuum Evaporator (CE1266-3).

Authority for Requirement: DNR Construction Permit 11-A-339-S1

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 155

Stack Opening (inches, dia.): 76

Exhaust Flowrate (scfm): 38,491

Exhaust Temperature (°F): 168

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 11-A-339-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5} ⁽⁴⁾	Performance Testing ⁽¹⁾	Once every 3 calendar years ⁽²⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀ ⁽³⁾	Performance Testing ⁽¹⁾	Once every 3 calendar years ⁽²⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Testing ⁽¹⁾	Once every 3 calendar years ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
SO ₂	Performance Testing ^{(1),(5)}	Once every 3 calendar years ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 6C

⁽¹⁾ The PM, PM₁₀, PM_{2.5} and SO₂ performance test shall be conducted while the Swiss Combi Dryer (EU1266.0) is being fired on biogas and natural gas. Biogas shall be fired at its maximum capacity and natural gas shall provide the remainder of the heat input required. The maximum design capacity for biogas is dependent on the operation of the Process Water Recovery Plant and the maximum quantity of biogas that may be transferred through the system to DH5. Therefore, performance testing shall be conducted under worst case operating conditions as identified by the owner or operator. These conditions shall be provided to the Department in the test protocol and in the test report. The test protocol shall also provide the average hourly biogas consumption rate (standard cubic feet per hour) in the dryer over the 12 months prior to the performance test.

⁽²⁾ After the completion of the initial performance test required by this permit, performance testing for PM, PM₁₀, PM_{2.5}, and SO₂ shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM₁₀, PM_{2.5}, and SO₂ emission limits in Condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, PM_{2.5}, and SO₂.

⁽³⁾ Performance testing may be conducted for total particulate matter to demonstrate compliance with the PM₁₀ limit specified in Condition 1.

⁽⁴⁾ If performance testing using the methods specified in 40 CFR 51, Appendix M, Methods 201A with 202 are not performed due to the high moisture content (stack saturation), then the owner or operator shall demonstrate compliance with the PM_{2.5} limit specified in Condition 1 by conducting methods specified in 40 CFR 60, Appendix A, Method 5 and 40 CFR 51, Appendix M, Method 202. Using Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried feed product (immediately following the feed dryers) to determine the PM_{2.5} fraction of the measured total filterable particulate. Using Method 202, the measured condensable fraction shall be considered all PM_{2.5} emissions.

⁽⁵⁾ During the SO₂ performance test, the owner or operator shall collect a sample of the biogas being sent to the dryer during each stack test run. The H₂S concentration of the the biogas shall be determined using a GC/FPD analysis. The H₂S concentration of the biogas measured during the SO₂ performance test shall be supplied with the test report. The owner or operator may request different test methods in the testing protocol to measure the H₂S concentration in the biogas.

Authority for Requirement: DNR Construction Permit 11-A-339-S1

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 199.0

Associated Equipment

Table: DH4 & DH5 Feed Milling & Transport

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1273.1	DH4 Stedman Mill and Product Transport	Feed	18 tons/hr	DH4 Mill Product Transport System Receiving Baghouse (CE1273-1)
1273.2	DH4 Stedman Cage Mill Feed Transport		18 tons/hr	DH4 Mill Feed Receiving Baghouse (CE1273-2)
1273.3	DH5 Stedman Mill and Product Transport		35 tons/hr	DH5 Mill Product Transport System Receiving Baghouse (CE1273-3)
1273.4	Closed Circuit Fluid Bed Cooler including DH4 Mill Feed Bed Cooler Baghouse		18 tons/hr	Closed loop system that does not vent directly to EP199.0

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 14-A-502-S1
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.79 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-502-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.71 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-502-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.71 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 14-A-502-S1, 567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 1.0 lb/hr; 500 ppmv
Authority for Requirement: DNR Construction Permit14-A-502-S1
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.2 lb/hr
Authority for Requirement: DNR Construction Permit14-A-502-S1

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The differential pressure drop across DH4 Mill Product Transport System Receiving Baghouse (CE1273-1) shall be maintained between 0.3 and 6 inches water column while the equipment is in operation.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the DH4 Mill Product Transport System Receiving Baghouse (CE1273-1). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the DH4 Mill Product Transport System Receiving Baghouse (CE1273-1), in inches of water, continuously. If the pressure drop across the Baghouse (CE1273-1) falls outside the range specified in Condition 5.A., the owner or operator shall investigate the Baghouse (CE1273-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Baghouse (CE1273-1) is not in operation.
- B. The differential pressure drop across DH4 Mill Feed Receiving Baghouse (CE1273-2) shall be maintained between 0.3 and 6 inches water column while the equipment is in operation.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the DH4 Mill Feed Receiving Baghouse (CE1273-2). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the pressure drop across the DH4 Mill Feed Receiving Baghouse (CE1273-2), in inches of water, continuously. If the pressure drop across the Baghouse (CE1273-2) falls outside the range specified in Condition B., the owner or operator shall investigate the Baghouse (CE1273-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Baghouse (CE1273-2) is not in operation.
- C. The differential pressure drop across the DH5 Mill Product Transport System Receiving Baghouse (CE1273-3) shall be maintained between 0.3 and 6 inches water column while the equipment is in operation.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the DH5 Mill Product Transport System Receiving Baghouse (CE1273-3). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the DH5 Mill Product Transport System Receiving Baghouse (CE1273-3), in inches of water, continuously. If the pressure drop across the Baghouse (CE1273-3) falls outside the range specified in Condition C., the owner or operator shall investigate the Baghouse (CE1273-3) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Baghouse (CE1273-3) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the DH4 Mill Product Transport System Receiving Baghouse (CE1273-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the DH4 Mill Product Transport System Receiving Baghouse (CE1273-1).
- E. The owner or operator shall develop an operating and maintenance plan for the DH4 Mill Feed Receiving Baghouse (CE1273-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the DH4 Mill Feed Receiving Baghouse (CE1273-2).

- F. The owner or operator shall develop an operating and maintenance plan for the DH5 Mill Product Transport System Receiving Baghouse (CE1273-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the DH5 Mill Product Transport System Receiving Baghouse (CE1273-3).

Authority for Requirement: DNR Construction Permit 14-A-502-S1

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 152

Stack Opening (inches, dia.): 54

Exhaust Flowrate (scfm): 41,276

Exhaust Temperature (°F): 130

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 14-A-502-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing:

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance Test	Once every 3 calendar years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀ ⁽²⁾	Performance Test	Once every 3 calendar years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Test	Once every 3 calendar years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽¹⁾Performance testing for PM, PM₁₀, and PM_{2.5}, shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM₁₀, and PM_{2.5} emission limits in Condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, and PM_{2.5}.

⁽²⁾Performance testing may be conducted for total particulate matter to demonstrate compliance with the PM₁₀ limit specified in Condition 1.

Authority for Requirement: DNR Construction Permit 14-A-502-S1

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 119.0, 167.0

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
119.0	1234.0	Dryer House Warehouse # 1 Crown Feed Cooler	Dry Feed	25 tons/hr	Pulse Jet Baghouse: 1234-2
167.0	1242.0	Dryer House Warehouse # 2 Crown Feed Cooler	Dry Feed	25 tons/hr	Pulse Jet Baghouse: 1242-1

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

	Emission Point 119.0	Emission Point 167.0	Authority for Requirement
Opacity	40% ⁽¹⁾	40% ⁽¹⁾	75-A-353-S2, 90-A-111-S1, 567 IAC 23.3(2)"d"
Particulate Matter (PM _{2.5})	0.10 lb/hr	0.11 lb/hr	75-A-353-S2, 90-A-111-S1
Particulate Matter (PM ₁₀)	0.42 lb/hr	0.20 lb/hr	75-A-353-S2, 90-A-111-S1
Particulate Matter (PM)	0.42 lb/hr; 0.1 gr/dscf	0.20 lb/hr; 0.1 gr/dscf	75-A-353-S2, 90-A-111-S1, 567 IAC 23.4(7)
Sulfur Dioxide (SO ₂)	0.20 lb/hr; 500 ppmv	0.20 lb/hr; 500 ppmv	75-A-353-S2, 90-A-111-S1
Volatile Organic Compounds (VOC)	NA	15 ppm _{v,d}	90-A-111-S1

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾Required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The differential pressure drop across Baghouses (CE1234-2) and (CE1242-1) shall be maintained between 0.3 and 6 inches water column while the equipment is in operation.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across Baghouses (CE1234-2) and (CE1242-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall develop an operating and maintenance plan for Baghouses (CE1234-2) and (CE1242-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

Reporting & Record keeping

- A. The owner or operator shall collect and record the pressure drop across Baghouses (CE1234-2) and (CE1242-1), in inches of water, on a continuous basis. If the pressure drop across Baghouses (CE1234-2) and (CE1242-1) falls outside the range specified in Operating Limit Condition A, the owner or operator shall investigate Baghouses (CE1234-2) and (CE1242-1) and make corrections. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouses (CE1234-2) and (CE1242-1) is not in operation.
- B. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Baghouses (CE1234-2) and (CE1242-1).

Authority for Requirement: DNR Construction Permits 75-A-353-S2, 90-A-111-S1

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

Emission Point Number	Stack Height (ft, from the ground)	Stack Opening (inches, dia.)	Exhaust Flowrate (scfm)	Exhaust Temperature (F)	Discharge Style
119.0	80.0	24	9,860	89	Vertical Unobstructed
167.0	80.0	27	8,500	82	Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 75-A-353-S2, 90-A-111-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 190A (a.k.a. 190.1), 190B (a.k.a. 190.2)

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
190A	1256.0	GP2 Gluten Loadout Pneumatic Transport System	Gluten	32.0 tons/hr	Pulse Jet Baghouse: 1256-1
190B	1257.0	GP2 Gluten Truck Loadout Bin	Gluten	32.0 tons/hr	Bin Vent Filter: 1257-1

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

	Emission Point 190A	Emission Point 190B	Authority for Requirement
Opacity	40% ⁽¹⁾	40% ⁽¹⁾	02-A-781-S3, 02-A-782-S3, 567 IAC 23.3(2)"d"
Particulate Matter (PM _{2.5})	0.021 lb/hr	0.002 lb/hr	02-A-781-S3, 02-A-782-S3
Particulate Matter (PM ₁₀)	0.11 lb/hr	0.009 lb/hr	02-A-781-S3, 02-A-782-S3
Particulate Matter (PM)	0.11 lb/hr; 0.1 gr/dscf	0.009 lb/hr; 0.1 gr/dscf	02-A-781-S3, 02-A-782-S3, 567 IAC 23.4(7)
Sulfur Dioxide (SO ₂)	0.125 lb/hr; 5.0 ppm _{v,d} ⁽²⁾	0.005 lb/hr; 5.0 ppm _{v,d} ⁽²⁾	02-A-781-S3, 02-A-782-S3
Volatile Organic Compounds (VOC)	14.8 ppm _{v,d} ⁽²⁾	14.8 ppm _{v,d} ⁽²⁾	02-A-781-S3, 02-A-782-S3

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾Required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Emission Point 190A

- A. The differential pressure drop across Baghouse (CE1256-1) shall be maintained between 0.3 and 6 inches water column while the equipment is in operation.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Baghouse (CE1256-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE1256-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- D. The owner or operator shall collect and record the pressure drop across the Baghouse (CE1256-1), in inches of water, on a daily basis. If the pressure drop across Baghouse (CE1256-1) falls outside the range specified in Operating Limits condition A., the owner or operator shall investigate Baghouse (CE1256-1) and make corrections to Baghouse (CE1256-1). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE1256-1) is not in operation.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE1256-1).

Emission Point 190B

- A. The owner or operator shall conduct visible emissions observation on emission point (EP190B) once per calendar day.
- B. The owner or operator shall develop an operating and maintenance plan for Bin Vent Filter (CE1257-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- C. If the owner or operator observes visible emissions from EP190B, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.
- D. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bin Vent Filter (CE1257-1).

Authority for Requirement: DNR Construction Permits 02-A-781-S3, 02-A-782-S3

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

Emission Point Number	Stack Height (ft, from the ground)	Stack Opening (inches, dia.)	Exhaust Flowrate (scfm)	Exhaust Temperature (F)	Discharge Style
190A	77	12	2,850	80	Downward
190B	77	6	100	70	Horizontal

Authority for Requirement: DNR Construction Permits 02-A-781-S3, 02-A-782-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Feed Truck Loadout

Associated Equipment

Table: Feed Truck Loadout

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
179.0	1258.0	Gluten Surge Bin, Feed Loading Surge Bin, GP2 #1 Feed Truck Loadout	Feed	100 tons/yr	Pulse Jet Baghouse – West Hood Baghouse: 1258-1
180.0	1259.0	Gluten Surge Bin, Feed Loading Surge Bin, GP2 #2 Feed Truck Loadout	Feed	100 tons/yr	Pulse Jet Baghouse – East Hood Baghouse: 1259-1

Applicable Requirements

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

The emissions from each of these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permits 92-A-383-S3, 92-A-385-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permits 92-A-383-S3, 92-A-385-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.50 lb/hr

Authority for Requirement: DNR Construction Permits 92-A-383-S3, 92-A-385-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.50 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits 92-A-383-S3, 92-A-385-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.25 lb/hr (RACT limit); 5.0 ppm_{v,d} ⁽²⁾

Authority for Requirement: DNR Construction Permits 92-A-383-S3, 92-A-385-S2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 3.0 ppm_{v,d}⁽²⁾

Authority for Requirement: DNR Construction Permits 92-A-383-S3, 92-A-385-S2

⁽²⁾Required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The differential pressure drop across the Pulse Jet Baghouse (CE1258-1) and (CE1259-1) shall be maintained between 0.1 and 6 inches water column.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE1258-1) and (CE1259-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE1258-1) and (CE1259-1), in inches of water, on a daily basis. If the pressure drop across the Pulse Jet Baghouse (CE1258-1) and (CE1259-1) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Pulse Jet Baghouse (CE1258-1) and (CE1259-1), and make corrections to the Pulse Jet Baghouse (CE1258-1) and (CE1259-1). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE1258-1) and (CE1259-1) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE1258-1) and (CE1259-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE1258-1) and (CE1259-1).

Authority for Requirement: DNR Construction Permits 92-A-383-S3, 92-A-385-S2

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 75

Stack Opening (inches, dia.): 30

Exhaust Flowrate (scfm): 21,670

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 92-A-383-S3, 92-A-385-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 318.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Rated Capacity	Control Equipment	
1217.0	GP1 #1 Gluten Flash Dryer w/ Product Recovery Cyclone	1.35 tons of dried gluten per hour	GP1 TurboTak Spray Chamber Scrubber w/ Cyclonic Separator (CE1217-3)	GP1 Regenerative Thermal Oxidizer (CE1217-4), Maximum Heat Input: 16.5 MMBtu per hour with Low NOx Burners
1217.1	GP1 #1 Gluten Flash Dryer Direct Fired Burner	16 MMBtu per hour		
1217.2	GP1 #2 Gluten Flash Dryer w/Product Recovery Cyclone	1.35 tons of dried gluten per hour		
1217.3	GP1 #2 Gluten Flash Dryer Direct Fired Burner	16 MMBtu per hour		
1244.0	GP2 #4 Gluten Flash Dryer w/six Parallel Product Recovery Cyclones	6.13 tons of dried gluten per hour	GP2 Impingent Wet Scrubber (CE1244-1)	GP2 Regenerative Thermal Oxidizer (CE1244-2), Maximum Heat Input: 16.5 MMBtu per hour with Low NOx Burners
1244.1	GP2 Low-NOx Burner	36.0 MMBtu per hour (total); 28,000 SCFH (Biogas); 36,000 SCFH (Natural Gas)		

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 – Emission Point 318.0

Pollutant	lb/hr	tons/yr	Other Limits	Authority for Requirement
Opacity	NA	NA	40% ⁽¹⁾	19-A-515-S1, 567 IAC 23.3(2)"d"
Particulate Matter (PM _{2.5})	5.0	NA	NA	19-A-515-S1
Particulate Matter (PM ₁₀)	11.30	NA	NA	19-A-515-S1
Particulate Matter (PM)	11.30	NA	0.1 gr/dscf	19-A-515-S1, 567 IAC 23.4(7)
Sulfur Dioxide (SO ₂)	5.45 ⁽²⁾		500 ppmv	RACT, 567 IAC 23.3"e"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ The SO₂ limit is established to address the nonattainment designation for a portion of Muscatine County published in the Federal Register (78 FR 47191) on August 5, 2013. The nonattainment designation is for the 1-hour SO₂ primary national ambient air quality standard promulgated by EPA in 2010 (75 FR 35519, June 22, 2010).

Emission Limits – Emission Units 1217.0, 1217.1, 1217.2, 1217.3

Pollutant	lb/hr	tons/yr	Other Limits	Authority for Requirement
Volatile Organic Compounds (VOC)	NA	NA	98% Control Efficiency or 10 ppm _{v,d} ^{(3),(4)}	19-A-515-S1

⁽³⁾ The limit for VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

⁽⁴⁾ Limit requires 98 percent control efficiency across GP1 Regenerative Thermal Oxidizer (CE1217-4) or VOC concentration of 10 ppm_{v,d} at the outlet of GP2 Regenerative Thermal Oxidizer (CE1244-2) or EP318.0. Compliance with limit shall be demonstrated by measuring the inlet and outlet VOC concentration and flowrate of GP1 Regenerative Thermal Oxidizer (CE1217-4) to determine control efficiency of GP1 Regenerative Thermal Oxidizer (CE1217-4) or measuring the VOC concentration at the outlet GP1 Regenerative Thermal Oxidizer (CE1217-4) or EP318.0. Control efficiency is defined as $\left[\frac{\text{inlet mass rate} - \text{outlet mass rate}}{\text{inlet mass rate}} \right] \times 100$.

Emission Limits – Emission Units 1244.0, 1244.1

Pollutant	lb/hr	tons/yr	Other Limits	Authority for Requirement
Particulate Matter (PM _{2.5})	4.45	NA	NA	19-A-515-S1
Particulate Matter (PM ₁₀)	5.31	NA	NA	19-A-515-S1
Particulate Matter (PM)	5.31	NA	NA	19-A-515-S1
Sulfur Dioxide (SO ₂)	4.50	NA	90% Control Efficiency or 10 ppm _{v,d} ^{(5),(6)}	19-A-515-S1
Hydrogen Sulfide (H ₂ S)	1.64	NA	NA	19-A-515-S1
Volatile Organic Compounds (VOC)	NA	NA	98% Control Efficiency or 10 ppm _{v,d} ^{(5),(7)}	19-A-515-S1
Nitrogen Oxides (NO _x)-Biogas	8.90	NA	0.09 lbs/MMBtu ⁽⁵⁾	19-A-515-S1
Nitrogen Oxides (NO _x)-Natural Gas		NA	0.14 lbs/MMBtu ⁽⁵⁾	19-A-515-S1
Carbon Monoxide (CO)-Biogas	8.90	NA	0.15 lbs/MMBtu ⁽⁵⁾	19-A-515-S1
Carbon Monoxide (CO)-Natural Gas		NA	0.10 lbs/MMBtu ⁽⁵⁾	19-A-515-S1

⁽⁵⁾The limit for VOC, SO₂, NO_x and CO emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

⁽⁶⁾Limit requires 90 percent control efficiency across GP2 Impingent Wet Scrubber (CE1244-1) or SO₂ concentration of 10 ppm_{v,d} from the outlet of the GP2 Impingent Wet Scrubber (CE1244-1). Compliance with limit shall be demonstrated by measuring the SO₂ concentration and flowrate of the inlet and outlet of GP2 Impingent Wet Scrubber (CE1244-1) to determine control efficiency of the scrubber or measuring the SO₂ concentration at the outlet of the GP2 Impingent Wet Scrubber (CE1244-1). Control efficiency is defined as
$$\left[\frac{\text{inlet mass rate} - \text{outlet mass rate}}{\text{inlet mass rate}} \right] \times 100.$$

⁽⁷⁾Limit requires 98 percent control efficiency across GP2 Regenerative Thermal Oxidizer (CE1244-2) or VOC concentration of 10 ppm_{v,d} at the outlet of GP2 Regenerative Thermal Oxidizer (CE1244-2) or EP318.0. Compliance with limit shall be demonstrated by measuring the inlet and outlet VOC concentration and flowrate of GP2 Regenerative Thermal Oxidizer (CE1244-2) to determine control efficiency of GP2 Regenerative Thermal Oxidizer (CE1244-2) or measuring the VOC concentration at the outlet GP2 Regenerative Thermal Oxidizer (CE1244-2) or EP318.0. Control efficiency is defined as
$$\left[\frac{\text{inlet mass rate} - \text{outlet mass rate}}{\text{inlet mass rate}} \right] \times 100.$$

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

GP2, #4 Gluten Flash Dryer (EU 1244.0)

- A. The #4 Gluten Flash Dyer shall only combust natural gas, natural gas mixed with biogas from on-site waste water treatment plant, and biogas from on-site wastewater treatment plant with combustion air.

Control Equipment- Scrubbers

- B. The GP1 Turbotak Scrubber (CE1217-3) atomizing liquor flow rate shall be maintained at or above 80 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the atomizing liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the atomizing liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3), in gallons per minute, continuously. If the atomizing liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3) falls below the value specified in Condition B, the owner or operator shall investigate the GP1 Turbotak Scrubber (CE1217-3) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the GP1 Turbotak Scrubber (CE1217-3) is not in operation.
- C. The GP1 Turbotak Scrubber (CE1217-3) wash liquor flow rate shall be maintained at or above 650 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the wash liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the wash liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3), in gallons per minute, continuously. If the wash liquor flow rate to the GP1 Turbotak Scrubber (CE1217-3) falls below the value specified in Condition C, the owner or operator shall investigate the GP1 Turbotak Scrubber (CE1217-3) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the GP1 Turbotak Scrubber (CE1217-3) is not in operation.

- D. The GP2 Impingent Wet Scrubber (CE1244-1) total liquor flowrate shall be maintained at or above 500 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the GP2 Impingent Wet Scrubber (CE1244-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to the GP2 Impingent Wet Scrubber (CE1244-1), in gallons per minute, continuously. If the total liquor flow rate to the GP2 Impingent Wet Scrubber (CE1244-1) falls below the value specified in Condition D, the owner or operator shall investigate the GP2 Impingent Wet Scrubber (CE1244-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the GP2 Impingent Wet Scrubber (CE1244-1) is not in operation.
- E. The pressure drop across GP2 Impingent Wet Scrubber (CE1244-1) shall be maintained between 6 to 12 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the GP2 Impingent Wet Scrubber (CE1244-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the GP2 Impingent Wet Scrubber (CE1244-1), in inches of water, continuously. If the pressure drop across the GP2 Impingent Wet Scrubber (CE1244-1) falls outside the range specified in Condition E, the owner or operator shall investigate the GP2 Impingent Wet Scrubber (CE1244-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP2 Impingent Wet Scrubber (CE1244-1) is not in operation.

- F. The pH range of the scrubbing liquor in GP1 Turbotak Scrubber (CE1217-3) shall be maintained between 5 and 8.
- i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the GP1 Turbotak Scrubber (CE1217-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the scrubbing liquor pH in GP1 Turbotak Scrubber (CE1217-3), on a continuous basis. If the pH of the scrubbing liquor GP1 Turbotak Scrubber (CE1217-3) falls outside the range specified in Condition F, the owner or operator shall investigate GP1 Turbotak Scrubber (CE1217-3) and make corrections to GP1 Turbotak Scrubber (CE1217-3). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP1 Turbotak Scrubber (CE1217-3) is not in operation.
- G. The pH range of the scrubbing liquor in GP2 Impingent Wet Scrubber (CE1244-1) shall be maintained between 5 and 8.
- i. The owner or operator shall properly operate and maintain equipment to monitor the scrubbing liquor pH to the GP2 Impingent Wet Scrubber (CE1244-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the scrubbing liquor pH in GP2 Impingent Wet Scrubber (CE1244-1), on a continuous basis. If the pH of the scrubbing liquor in GP2 Impingent Wet Scrubber (CE1244-1) falls outside the range specified in Condition G, the owner or operator shall investigate GP2 Impingent Wet Scrubber (CE1244-1) and make corrections to GP2 Impingent Wet Scrubber (CE1244-1). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP2 Impingent Wet Scrubber (CE1244-1) is not in operation.
- H. The owner or operator shall develop an operating and maintenance plan for GP1 Turbotak Scrubber (CE1217-3) and GP2 Impingent Wet Scrubber (CE1244-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP1 Turbotak Scrubber (CE1217-3).
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP2 Impingent Wet Scrubber (CE1244-1).

Control Equipment- RTOs

- I. The owner or operator shall only bypass GP2 Regenerative Thermal Oxidizer (CE1244-2) for purposes of start-up, malfunction and/or maintenance for a maximum of 200 hours per twelve month rolling period. GP2 Regenerative Thermal Oxidizer (CE1244-2) shall be in operation and at the operating temperature specified in condition 5J prior to processing any product (gluten).
 - i. The owner or operator shall develop and implement an operating plan to ensure GP2 Regenerative Thermal Oxidizer (CE1244-2) is at the required operating temperature prior to processing any gluten in GP2 #4 Gluten Flash Dyer. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.
 - ii. The owner or operator shall record the total hours and the cause of GP2 Regenerative Thermal Oxidizer (CE1244-2) bypass on a monthly basis. The owner or operator shall calculate and record the rolling 12-month totals.
- J. The owner or operator shall maintain a GP2 Regenerative Thermal Oxidizer (CE1244-2) combustion chamber temperature to no less than 1,600 degrees Fahrenheit based on a 3-hour block average.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the chamber temperature of GP2 Regenerative Thermal Oxidizer (CE1244-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the combustion chamber temperature of GP2 Regenerative Thermal Oxidizer (CE1244-2), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of GP2 Regenerative Thermal Oxidizer (CE1244-2) falls below the value specified in Condition J, the owner or operator shall investigate GP2 Regenerative Thermal Oxidizer (CE1244-2) and make corrections GP2 Regenerative Thermal Oxidizer (CE1244-2). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP2 Regenerative Thermal Oxidizer (CE1244-2) is not in operation.
- K. The owner or operator shall only bypass GP1 Regenerative Thermal Oxidizer (CE1217-4) for purposes of start-up, malfunction and/or maintenance for a maximum of 200 hours per twelve month rolling period. GP1 Regenerative Thermal Oxidizer (CE1217-4) shall be in operation and at the operating temperature specified in condition 5L prior to processing any product (gluten).
 - i. The owner or operator shall develop and implement an operating plan to ensure GP1 Regenerative Thermal Oxidizer (CE1217-4) is at the required operating temperature prior to processing any gluten in GP1 #1 and #2 Gluten Flash Dyers. The written plan and any documentation as required by the plan shall be

maintained onsite and available for inspection.

- ii. The owner or operator shall record the total hours and the cause of GP1 Regenerative Thermal Oxidizer (CE1217-4) bypass on a monthly basis. The owner or operator shall calculate and record the rolling 12-month totals.
- L. The owner or operator shall maintain a GP1 Regenerative Thermal Oxidizer (CE1217-4) combustion chamber temperature to no less than 1,600 degrees Fahrenheit based on a 3-hour block average.
- i. The owner or operator shall properly operate and maintain equipment to monitor the chamber temperature of GP1 Regenerative Thermal Oxidizer (CE1217-4). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the combustion chamber temperature of GP1 Regenerative Thermal Oxidizer (CE1217-4), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber temperature in °F. If the 3-hour block average combustion chamber temperature of GP1 Regenerative Thermal Oxidizer (CE1217-4) falls below the value specified in Condition L, the owner or operator shall investigate GP1 Regenerative Thermal Oxidizer (CE1217-4) and make corrections GP1 Regenerative Thermal Oxidizer (CE1217-4). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that GP1 Regenerative Thermal Oxidizer (CE1217-4) is not in operation.
- M. The owner or operator shall combust only natural gas or process off-gasses in GP2 Regenerative Thermal Oxidizer (CE1244-2) and GP1 Regenerative Thermal Oxidizer (CE1217-4).
- N. The owner or operator shall develop an operating and maintenance plan for GP2 Regenerative Thermal Oxidizer (CE1244-2) and GP1 Regenerative Thermal Oxidizer (CE1217-4), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP2 Regenerative Thermal Oxidizer (CE1244-2).
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP1 Regenerative Thermal Oxidizer (CE1217-4).

Low-NOx Burner (EU1244.1)

- O. The owner or operator shall tune Low-NOx Burner (EU1244.1) on an annual basis to maintain good combustion. The annual burner tune-up activity shall include at a minimum:
- i. Inspect the burner-Clean and replace any components, as necessary

- ii. Inspect the flame pattern and flame dimensions-Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications, if available.
 - iii. Inspect the air-to fuel ratio control system-Ensure the control system is calibrated and functioning properly, if such a system is installed.
 - iv. Optimize emissions of carbon dioxide- Optimize emissions consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which unit may be subject.
 - v. Verify that emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.
- P. The owner or operator shall maintain record on annual basis of the following:
- i. The completion date of Low-NOx Burner (EU1244.1) tuning as specified in condition 5O,
 - ii. Low-NOx Burner (EU1244.1) emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.
- Q. The owner or operator shall develop an operating and maintenance plan for the Low-NOx Burner (EU1244.1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Low-NOx Burner (EU1244.1).

Other Requirements

- R. The owner or operator shall maintain GP1 and GP2 Gluten Dryers Product Recovery Cyclones in manner to ensure proper operation.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the GP1 and GP2 Gluten Dryers Product Recovery Cyclones.

Authority for Requirement: DNR Construction Permit 19-A-515-S1

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 180

Stack Opening (inches, dia.): 78

Exhaust Flowrate (scfm): 102,000

Exhaust Temperature (°F): 235

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 19-A-515-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing – Emission Point 318.0

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance Testing ⁽¹⁾⁽⁵⁾	Once Every 3 Calendar Years ⁽³⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀	Performance Testing ⁽¹⁾⁽⁴⁾	Once Every 3 Calendar Years ⁽³⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM	Performance Testing ⁽¹⁾	Once Every 3 Calendar Years ⁽³⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
SO ₂	Performance Testing ⁽¹⁾⁽²⁾	Once Every 3 Calendar Years ⁽³⁾	1 hour	40 CFR 60, Appendix A, Method 6C

⁽¹⁾Performance testing shall be conducted at worst case emission scenario, #1, #2, and #4 Gluten Flash Dryers are operating at the same time and combusting natural gas (except for SO₂ testing).

⁽²⁾SO₂ performance tests shall be conducted while GP2, #4 Gluten Flash Dryer is firing on biogas.

⁽³⁾Performance testing for PM, PM₁₀, PM_{2.5}, and SO₂, shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with PM, PM₁₀, PM_{2.5}, SO₂ emission limits as specified in condition 1a, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, PM_{2.5}, and SO₂.

⁽⁴⁾Performance testing may be conducted for total particulate matter to demonstrate compliance with PM₁₀ limit as specified in permit condition 1a.

⁽⁵⁾If performance testing using methods specified in 40 CFR 51, Appendix M, 201A with 202 are not performed due high moisture content (stack saturation) then the owner or operator shall demonstrate compliance with PM_{2.5} limit as specified in permit conditions 1a and 1c by conducting methods specified in 40 CFR 60, Appendix A, Method 5 and 40 CFR 51 Appendix M Method 202. Utilizing Method 5, the filterable PM_{2.5} fraction shall be determined by

conducting internal particle sizing of the dried gluten product (immediately following the gluten dryers) to determine the PM_{2.5} fraction of the measured total filterable particulate. Utilizing Method 202, the measured condensable fraction shall be considered all PM_{2.5}.

Stack Testing – Emissions Units 1217.0, 1217.1, 1217.2, 1217.3

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
VOC	Performance Testing ⁽¹⁾⁽³⁾	Once Every 3 Calendar Years ⁽²⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

⁽¹⁾Performance testing shall be conducted as specified in condition 1b.

⁽²⁾Performance testing for VOC shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance VOC emission limits as specified in condition 1b, the owner or operator may request to modify the performance testing frequency for VOC. The next performance test for VOC shall be completed by December 31, 2022.

⁽³⁾As alternative, the owner or operator may elect to demonstrate RTO control efficiency using test method 40 CFR 60, Appendix A, Method 25A.

Stack Testing – Emission Units 1244.0, 1244.1

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
SO ₂ ⁽⁵⁾⁽⁶⁾⁽⁷⁾	Performance Testing	Once Every 3 Calendar Years ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 6C
VOC ⁽¹⁾⁽⁵⁾⁽⁸⁾	Performance Testing	Once Every 3 Calendar Years ⁽²⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

⁽¹⁾Performance testing shall be conducted at the exhaust outlet of GP2 Regenerative Thermal Oxidizer (CE1244-2) or at outlet of EP318.0 while Gluten Flash Dryer #1 and #2 are not in operation.

⁽²⁾Performance testing for SO₂, and VOC shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with SO₂ and VOC emission limits as specified in condition 1c, the owner or operator may request to modify the performance testing frequency for SO₂ and VOC. The next performance test for SO₂ and VOC shall be completed by December 31, 2022.

⁽³⁾Performance testing may be conducted for total particulate matter to demonstrate compliance with PM₁₀ limit as specified in permit condition 1c.

⁽⁴⁾If performance testing using methods specified in 40 CFR 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation) then the owner or operator shall demonstrate compliance with PM_{2.5} limit as specified in permit conditions 1a and 1c by conducting methods specified in 40 CFR 60, Appendix A, Method 5 and 40 CFR 51 Appendix M Method 202. Utilizing Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried gluten product (immediately following the gluten dryers) to determine the PM_{2.5} fraction of the measured total filterable particulate. Utilizing Method 202, the measured condensable fraction shall be considered all PM_{2.5}.

⁽⁵⁾Performance testing shall be conducted as specified in condition 1c or at outlet of EP318.0 while Gluten Flash Dryer #1 and #2 are not in operation.

⁽⁶⁾SO₂ and H₂S performance tests shall be conducted while GP2, #4 Gluten Flash Dryer is firing on biogas.

⁽⁷⁾During the SO₂ test, GPC shall collect a sample of the biogas being sent to the dryer during each stack test run. H₂S concentration shall be determined using a GC/FPD analysis. The H₂S concentrations determined during the SO₂ testing shall be supplied with the test reports submitted for SO₂. GPC may request different test methods in the testing protocol if alternative test methods or procedures are preferable.

⁽⁸⁾As alternative, the owner or operator may elect to demonstrate RTO control efficiency using test method 40 CFR 60, Appendix A, Method 25A.

⁽⁹⁾Performance testing shall be conducted at the exhaust outlet of GP2, #4 Gluten Flash Dryer or at the inlet to GP2 Regenerative Thermal Oxidizer (CE1244-2).

Authority for Requirement: DNR Construction Permits 19-A-515-S1

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: WETFEED

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1276.0	Wet Feed Pad and Loadout to Truck	Feed	1500 tons of wet feed per day Storage pile size of 10,500 ft ²	None

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 15-A-199-S2
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.038 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-199-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.068 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-199-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.17 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 15-A-199-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.20 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permit 15-A-199-S2
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The moisture content of the wet feed handled and loaded out shall not be less than 10%. The owner or operator shall maintain records on any analysis done on the moisture content of the wet feed.
- B. The amount of wet feed loaded out shall not exceed 150,000 tons in any rolling 12-month period.
 - i. The owner or operator shall maintain the following monthly records for the Wet Feed Pad and Loadout (EU1276.0):
 - a. The amount of wet feed loaded out, in tons; and
 - b. The rolling 12-month total of the amount of wet feed loaded out, in tons.

Authority for Requirement: DNR Construction Permit 15-A-199-S2

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: RAILCR1

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1274.0	Rail Car Loading of Feed	Feed	11.5 tons/hr	Spout Socks: 1274-1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 16-A-036
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.004 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-036

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.09 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-036

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.39 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-036
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall operate the spout socks (CE1274-1) at all times in a manner to minimize or eliminate particulate matter emissions from this emissions unit (EU1274.0).
- B. The owner or operator shall perform a monthly inspection on the spout socks (CE1274-1) to ensure it is in proper working condition. The results of the inspection shall be recorded.
- C. The owner or operator shall develop an operating and maintenance plan for the spout socks (CE1274-1), including a preventative maintenance schedule that is consistent with the manufacturer’s instructions for routine and long-term maintenance.
- D. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the spout socks (CE1274-1).

Authority for Requirement: DNR Construction Permit 16-A-036

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: FEEDBRG

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1277.0	Feed Barge Loading	Feed	75 tons per hour	Telescoping Loading Spout (CE1277-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 16-A-035
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit: 0.047 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-035
567 IAC 23.4(7)

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.38 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-035
567 IAC 23.4(7)

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.5 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-035
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall operate the telescoping loading spout (CE1277-1) at all times in a manner to minimize or eliminate particulate matter emissions from this emissions unit (EU1277.0).
- B. The owner or operator shall perform a monthly inspection on the telescoping loading spout (CE1277-1) to ensure it is in proper working condition. No inspection is required for the months that the emissions unit (EU1277.0) does not operate. Each month, the owner or operator shall record the results of the inspection or the reason that the inspection was not conducted.
- C. The owner or operator shall develop an operating and maintenance plan for the telescoping loading spout (CE1277-1), including a preventative maintenance schedule that is consistent with the manufacturer’s instructions for routine and long-term maintenance.
- D. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the telescoping loading spout (CE1277-1).

Authority for Requirement: DNR Construction Permit 16-A-035

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 143.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2431.0	#1 Starch Flash Dryer, direct fired, with Product Recovery Cyclones	Starch	10.9 tons dried starch per hour	Impingement Scrubber (CE2431-1)
2431.1	Dryer Duct Burner	Heat	40 MMBTU/hr heat input	Ultra Low NOx Burner (CE2431-2)

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 85-A-039-S2
567C 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 2.64 lb/hr

Authority for Requirement: DNR Construction Permit 85-A-039-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 6.0 lb/hr

Authority for Requirement: DNR Construction Permit 85-A-039-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 6.0 lb/hr; 0.1 gr/dscf; 0.05 gr/scf (LAER limit)

Authority for Requirement: DNR Construction Permit 85-A-039-S2
567 IAC 23.4(7)
566 IAC 31.20(1)"d"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.0 lb/hr; 500 ppmv
Authority for Requirement: DNR Construction Permit 85-A-039-S2
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxide (NO_x)
Emission Limit(s): 0.04 lb/MMBtu
Authority for Requirement: DNR Construction Permit 85-A-039-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.0 ppm_{v,d}⁽²⁾
Authority for Requirement: DNR Construction Permit 85-A-039-S2
⁽²⁾Required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 10.0 lb/hr
Authority for Requirement: DNR Construction Permit 85-A-039-S2

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. #1 Starch Flash Dryer (EU2431.1) shall combust only natural gas. Prior to burning any other fuels in this unit, the owner or operator shall obtain a permit modification from the IDNR, Air Quality Bureau.
- B. #1 Starch Flash Dryer (EU2431.0) is limited to a maximum starch production rate of 95,484 tons per rolling 12-month period on a dry solids basis.
 - i. The owner or operator shall maintain the following monthly records:
 - a. The amount of starch produced by #1 Starch Flash Dryer (EU2431.0) in tons; and
 - b. The rolling 12-month total of the amount of starch produced by #1 Starch Flash Dryer (EU2431.0).
- C. The Impingement Scrubber (CE2431-1) total liquor flowrate shall be maintained at or above 200 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flowrate to the Impingement Scrubber (CE2431-1). The monitoring devices and any records shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the total liquor flow rate to the Impingement Scrubber (CE2431-1), in gallons per minute on a daily basis. If the liquor flowrate to the Impingement Scrubber (CE2431-1) falls below the value specified in Condition 5.C., the owner or operator shall investigate the Impingement Scrubber (CE2431-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Impingement Scrubber (CE2431-1) is not in operation.
- D. The pressure drop across Impingement Scrubber (CE2431-1) shall be maintained between 6 to 11 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Impingement Scrubber (CE2431-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Impingement Scrubber (CE2431-1), in inches of water, at least once per day. If the pressure drop across the Impingement Scrubber (CE2431-1) falls outside the range specified in Condition 5.D., the owner or operator shall investigate the Impingement Scrubber (CE2431-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Impingement Scrubber (CE2431-1) is not in operation.
- E. The owner or operator shall utilize only fresh water (city water) or fresh water (city water) and clarifier filtrate (filtered plant water) blend as the make-up water for Impingement Scrubber (CE2431-1).
- i. The owner or operator shall maintain a record that only fresh water (city water) or fresh water (city water) and clarifier filtrate (filtered plant water) blend are utilized as make-up water for Impingement Scrubber (CE2431-1).
- F. The owner or operator shall tune Ultra Low NOx Burner (CE2431-2) on an annual basis. The annual Ultra Low NOx Burner (CE2431-2) tuning shall include at a minimum:
- i. Burner inspection - Clean and replace any components, as necessary
 - ii. Flame inspection - Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications.
 - iii. Inspect the air-to fuel ratio control system - Ensure the control system is calibrated and functioning properly.
 - iv. Optimize emissions - Optimize CO and NOx emissions consistent with the manufacturer's specifications.

- v. The owner or operator shall maintain a record on an annual basis of the Ultra Low NOx Burner (CE2431-2) tuning and that burner emissions and oxygen levels have been optimized per the manufacturer's specifications.
 - vi. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Ultra Low NOx Burner (CE2431-2).
- G. The owner or operator shall develop an operating and maintenance plan for Impingement Scrubber (CE2431-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Impingement Scrubber (CE2431-1).
- H. The owner or operator shall develop an operating and maintenance plan for the Product Recovery Cyclones including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclones.

Authority for Requirement: DNR Construction Permit 85-A-039-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 177.0

Stack Opening (inches): 96

Exhaust Flow Rate (scfm): 85,000

Exhaust Temperature (°F): 110

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 85-A-039-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing:

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM ₁₀	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM _{2.5}	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
CO	Performance Testing	Once Every 6 Calendar Years ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 10

⁽¹⁾ Performance testing for PM, PM₁₀, and PM_{2.5} shall be conducted once every 3 calendar years.

⁽²⁾ Performance testing for CO shall be conducted once every 6 calendar years.

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)

Authority for Requirement: DNR Construction Permit 85-A-039-S2

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 278.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
2433.0	Starch Building	Steeped Corn	100,000 scfm (total of five exhaust fans)

Applicable Requirements

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

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.10 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permit 15-A-208
567 IAC 23.3(2)"e"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): NA

Stack Opening (inches, dia.): NA

Exhaust Flowrate (scfm): 100,000

Exhaust Temperature (°F): 68

Discharge Style: NA

Authority for Requirement: DNR Construction Permit 15-A-208

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 158.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2424.0	#2 Starch Flash Dryer, direct fired, with Product Recovery Cyclones	Starch	20.0 tons dried starch per hour	Impingement Scrubber (CE2424-1)
2424.1	Dryer Duct Burner	Heat	50 MMBTU/hr heat input	Ultra-Low NO _x Burner (CE2424-2)

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 90-A-258-S2
567C 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 2.10 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-258-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 4.22 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-258-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 4.22 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 90-A-258-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.40 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 90-A-258-S2, 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxide (NO_x)
Emission Limit(s): 0.04 lb/MMBtu
Authority for Requirement: DNR Construction Permit 90-A-258-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.0 ppm_{v, d}⁽²⁾
Authority for Requirement: DNR Construction Permit 90-A-258-S2

⁽²⁾ Required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 12.50 lb/hr
Authority for Requirement: DNR Construction Permit 90-A-258-S2

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. #2 Starch Flash Dryer (EU2424.1) shall combust only natural gas. Prior to burning any other fuels in this unit, the owner or operator shall obtain a permit modification from the IDNR, Air Quality Bureau.
- B. #2 Starch Flash Dryer (EU2424.0) is limited to a maximum starch production rate of 142,788 tons per rolling 12-month period on a dry solids basis.
 - i. The owner or operator shall maintain the following monthly records:
 - a. The amount of starch produced by #2 Starch Flash Dryer (EU2424.0) in tons; and
 - b. The rolling 12-month total of the amount of starch produced by #2 Starch Flash Dryer (EU2424.0).
- C. The Impingement Scrubber (CE2424-1) total liquor flowrate shall be maintained at or above 800 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flowrate to the Impingement Scrubber (CE2424-1). The monitoring devices and any records shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the total liquor flow rate to the Impingement Scrubber (CE2424-1), in gallons per minute on a daily basis. If the liquor flowrate to the Impingement Scrubber (CE2424-1) falls below the value specified in Condition 5.C., the owner or operator shall investigate the Impingement Scrubber (CE2424-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Impingement Scrubber (CE2424-1) is not in operation.
- D. The pressure drop across Impingement Scrubber (CE2424-1) shall be maintained between 8 to 14 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Impingement Scrubber (CE2424-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Impingement Scrubber (CE2424-1), in inches of water, at least once per day. If the pressure drop across the Impingement Scrubber (CE2424-1) falls outside the range specified in Condition 5.D., the owner or operator shall investigate the Impingement Scrubber (CE2424-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Impingement Scrubber (CE2424-1) is not in operation.
- E. The owner or operator shall utilize only fresh water (city water) or fresh water (city water) and clarifier filtrate (filtered plant water) blend as the make-up water for Impingement Scrubber (CE2424-1).
- i. The owner or operator shall maintain a record that only fresh water (city water) or fresh water (city water) and clarifier filtrate (filtered plant water) blend are utilized as make-up water for Impingement Scrubber (CE2424-1).
- F. The owner or operator shall tune Ultra Low NOx Burner (CE2424-2) on an annual basis. The annual Ultra Low NOx Burner (CE2424-2) tuning shall include at a minimum:
- i. Burner inspection - Clean and replace any components, as necessary
 - ii. Flame inspection - Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications.
 - iii. Inspect the air-to fuel ratio control system - Ensure the control system is calibrated and functioning properly.
 - iv. Optimize emissions - Optimize CO and NOx emissions consistent with the manufacturer's specifications.
 - v. The owner or operator shall maintain a record on an annual basis of the Ultra Low NOx Burner (CE2424-2) tuning and that burner emissions and oxygen levels have been optimized per the manufacturer's specifications.

- vi. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Ultra Low NOx Burner (CE2424-2).
- G. The owner or operator shall develop an operating and maintenance plan for Impingement Scrubber (CE2424-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Impingement Scrubber (CE2424-1).
- H. The owner or operator shall develop an operating and maintenance plan for the Product Recovery Cyclones including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclones.

Authority for Requirement: DNR Construction Permit 90-A-258-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 179

Stack Opening (inches): 96.1

Exhaust Flow Rate (scfm): 105,000

Exhaust Temperature (°F): 110

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 90-A-258-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing:

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM ₁₀	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM _{2.5}	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
CO	Performance Testing	Once Every 6 Calendar Years ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 10

⁽¹⁾Performance testing for PM, PM₁₀, and PM_{2.5} shall be conducted once every 3 calendar years.

⁽²⁾ Performance testing for CO shall be conducted once every 6 calendar years.

Authority for Requirement: DNR Construction Permit 90-A-258-S2

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Starch Silos 1-4

Associated Equipment

Table: Starch Silos 1-4

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
149.0	2419.0	Starch WHSE Food Grade Silo #1	Cornstarch	40,000 lb/hr	Pulse Jet Baghouse (CE2419-1)
150.0	2420.0	Starch WHSE Food Grade Silo #2	Cornstarch	40,000 lb/hr	Pulse Jet Baghouse (CE2420-1)
151.0	2421.0	Starch WHSE Food Grade Silo #3	Cornstarch	40,000 lb/hr	Pulse Jet Baghouse (CE2421-1)
152.0	2422.0	Starch WHSE Food Grade Silo #4	Cornstarch	40,000 lb/hr	Pulse Jet Baghouse (CE2422-1)

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 85-A-081-S3, 85-A-082-S3, 85-A-083-S3, 85-A-084-S3, 567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.039 lb/hr

Authority for Requirement: DNR Construction Permit 85-A-081-S3, 85-A-082-S3, 85-A-083-S3, 85-A-084-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.103 lb/hr

Authority for Requirement: DNR Construction Permit 85-A-081-S3, 85-A-082-S3, 85-A-083-S3, 85-A-084-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.103 lb/hr; 0.1 gr/dscf, 0.02 gr/dscf

Authority for Requirement: DNR Construction Permit 85-A-081-S3, 85-A-082-S3,
85-A-083-S3, 85-A-084-S3, 567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. By their design, only two of the four starch storage silos identified as EU2419.0, EU2420.0, EU2421.0, and EU2422.0 can be filled at any one time. Therefore, only two starch storage silos exhaust to the atmosphere at any one time.
- B. The maximum capacity of filling any one of the four silos is 40,000 pounds of starch per hour. This is based on the maximum production output of #2 Starch Flash Dryer.
 - i. The maximum capacity of filling any two of the four silos at one time is 61,800 pounds of starch per hour. This is based on the combined maximum production outputs of #1 Starch Flash Dryer and #2 Starch Flash Dryer.
- C. The owner or operator shall check for visible emissions from the Pulse Jet Baghouse (CE2422-1) once per day at a time when the emission unit (EU2422.0) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Pulse Jet Baghouse (CE2422-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE2422-1) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE2422-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE2422-1).

Authority for Requirement: DNR Construction Permit 85-A-081-S3, 85-A-082-S3,
85-A-083-S3, 85-A-084-S3

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 117

Stack Opening (inches, dia.): 10

Exhaust Flowrate (scfm): 1,200

Exhaust Temperature (°F): 80

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 85-A-081-S3, 85-A-082-S3,
85-A-083-S3, 85-A-084-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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)

Emission Point ID Numbers: See Table: Starch Silos 5-10

Associated Equipment

Table: Starch Silos 5-10

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
159.0	2425.0	Starch WHSE #5 Starch Silo	Cornstarch	40,000 lb/hr	Bin Vent Filter (CE2425-1)
160.0	2426.0	Starch WHSE #6 Starch Silo	Cornstarch	40,000 lb/hr	Bin Vent Filter (CE2426-1)
161.0	2427.0	Starch WHSE #7 Starch Silo	Cornstarch	40,000 lb/hr	Bin Vent Filter (CE2427-1)
162.0	2428.0	Starch WHSE #8 Starch Silo	Cornstarch	40,000 lb/hr	Bin Vent Filter (CE2428-1)
171.0	2429.0	Starch WHSE #9 Starch Silo	Cornstarch	40,000 lb/hr	Bin Vent Filter (CE2429-1)
172.0	2430.0	Starch WHSE #10 Starch Silo	Cornstarch	40,000 lb/hr	Bin Vent Filter (CE2430-1)

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 90-A-259-S2, 90-A-260-S2, 90-A-261-S2, 90-A-262-S2, 90-A-359-S2, 90-A-360-S2, 567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.05 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-259-S2, 90-A-260-S2, 90-A-261-S2, 90-A-262-S2, 90-A-359-S2, 90-A-360-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.13 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-259-S2, 90-A-260-S2, 90-A-261-S2, 90-A-262-S2, 90-A-359-S2, 90-A-360-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.13 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 90-A-259-S2, 90-A-260-S2,
90-A-261-S2, 90-A-262-S2, 90-A-359-S2, 90-A-360-S2,
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. By their design, only two of the six starch storage bins identified as EU2425.0, EU2426.0, EU2427.0, EU2428.0, EU2429.0, and EU2430.0 can be filled at any one time. Therefore, only two storage bins exhaust to the atmosphere at any one time.
- B. The maximum capacity of filling any one of the six silos is 40,000 pounds of starch per hour. This is based on the maximum production output of #2 Starch Flash Dryer.
 - i. The maximum capacity of filling any two of the six silos at one time is 61,800 pounds of starch per hour. This is based on the combined maximum production outputs of #1 Starch Flash Dryer and #2 Starch Flash Dryer.
- C. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE2430-1) once per day at a time when the emission unit (EU2430.0) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE2430-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Bin Vent Filter (CE2430-1) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Bin Vent Filter (CE2430-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bin Vent Filter (CE2430-1).

Authority for Requirement: DNR Construction Permit 90-A-259-S2, 90-A-260-S2,
90-A-261-S2, 90-A-262-S2, 90-A-359-S2, 90-A-360-S2

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 94

Stack Opening (inches, dia.): 12

Exhaust Flowrate (scfm): 1,500

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal Discharge

Authority for Requirement: DNR Construction Permit 90-A-259-S2, 90-A-260-S2,
90-A-261-S2, 90-A-262-S2, 90-A-359-S2, 90-A-360-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 155.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2423.0	Starch Warehouse, Super Sacker	Cornstarch	45 tons of starch per hour	Pulse Jet Baghouse (CE2423-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 89-A-085-S2
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 1.30 lb/hr

Authority for Requirement: DNR Construction Permit 89-A-085-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.60 lb/hr

Authority for Requirement: DNR Construction Permit 89-A-085-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.60 lb/hr, 0.1gr/dscf

Authority for Requirement: DNR Construction Permit 89-A-085-S2
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The Super Sacker (EU2423.0) shall not load out more than 76,000 pounds of starch per hour (38 tons per hour).
- B. Each day, the owner or operator shall record the number of hours that the Super Sacker (EU2423.0) was operated and the amount of starch that was loaded out in pounds. The pounds per hour throughput shall be determined each day by dividing the total amount of starch loaded out by the Super Sacker (EU2423.0) by the number of hours that the Super Sacker (EU2423.0) operated each day.
- C. The differential pressure drop across the Pulse Jet Baghouse (CE2423-1) shall be maintained between 0.6 and 6 inches water column.
- D. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2423-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- E. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE2423-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE2423-1) falls outside the range specified in Condition 5 C., the owner or operator shall investigate the Pulse Jet Baghouse (CE2423-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE2423-1) is not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE2423-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routing and long-term maintenance.
- G. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE2423-1).

Authority for Requirement: DNR Construction Permit 89-A-085-S2

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 122
Stack Opening (inches, dia.): 20
Exhaust Flowrate (scfm): 10,909
Exhaust Temperature (°F): 92
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 89-A-085-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance Test	Initial test and once every 3 calendar years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀	Performance Test	Initial test and once every 3 calendar years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Test	Initial test and once every 3 calendar years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽¹⁾ After the completion of the initial performance test, performance testing for PM, PM₁₀, and PM_{2.5}, shall be conducted once every 3 calendar years.

Authority for Requirement: DNR Construction Permit 89-A-085-S2

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)

Emission Point ID Number: 144.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2436.0	Starch Warehouse Food-Grade Bagger- Bagging & Super Sacking	Cornstarch	20 tons/hr	Pulse Jet Baghouse (2436-3)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 90-A-307-S2
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.21 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-307-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.56 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-307-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.56 lb/hr ; 0.1 gr/dscf; 0.02 gr/scf (LAER limit)

Authority for Requirement: DNR Construction Permit 90-A-307-S2
567 IAC 23.4(7)
567 IAC 31.20(1)"d"

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The differential pressure drop across Baghouse (CE2436-3) shall be maintained between 0.5 and 6 inches water column while the equipment is in operation.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Baghouse (CE2436-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE2436-3) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- D. The owner or operator shall collect and record the pressure drop across the Baghouse (CE2436-3), in inches of water, on a continuous basis. If the pressure drop across Baghouse (CE2436-3) falls outside the range specified in Operating Limits condition A., the owner or operator shall investigate Baghouse (CE2436-3) and make corrections to Baghouse (CE2436-3). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE2436-3) is not in operation.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE2436-3).

Authority for Requirement: DNR Construction Permit 90-A-307-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 140.0

Stack Opening (inches, dia.): 36

Exhaust Flow Rate (scfm): 13,130

Exhaust Temperature (°F): 85

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 90-A-307-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 122.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2435.0	Starch Warehouse, Pearl (LR) Silo	Pearl Starch	22.3 tons of starch per hour	Pulse Jet Baghouse (CE2435-2)

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.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 76-A-262-S3
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.064 lb/hr

Authority for Requirement: DNR Construction Permit 76-A-262-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.171 lb/hr

Authority for Requirement: DNR Construction Permit 76-A-262-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.171 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 76-A-262-S3
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The differential pressure drop across the Pulse Jet Baghouse (CE2435-2) shall be maintained between 0.2 and 6 inches water column.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2435-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE2435-2), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE2435-2) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Pulse Jet Baghouse (CE2435-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE2435-2) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE2435-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routing and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE2435-2).

Authority for Requirement: DNR Construction Permit 76-A-262-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 110
Stack Opening (inches, dia.): 12x16
Exhaust Flowrate (cfm): 2,481
Exhaust Temperature (°F): 87
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 76-A-262-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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

Monitoring and Recordkeeping satisfy CAM requirements, additional CAM plan not required.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 130.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2434.0	Starch Warehouse, Four Starch Industrial Packers	Corn Starch	9 tons of starch per hour per packer	Pulse Jet Baghouse (CE2434-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 02-A-760-S3
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.078 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-760-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.108 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-760-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.108 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 02-A-760-S3
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The Four Starch Packers (EU2434.0) combined shall not load out more than 54,000 pounds of starch per hour (27 tons per hour).
- B. Each day, the owner or operator shall record the number of hours that the starch packers (EU2434.0) were operated and the amount of starch that was loaded out in pounds. The pounds per hour throughput shall be determined each day by dividing the total amount of starch bagged from the number of starch packers running that day (EU 2434.0) by the number of hours that same packers operated that day.
- C. The differential pressure drop across the Pulse Jet Baghouse (CE2434-1) shall be maintained between 1 and 8 inches water column.
- D. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2434-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- E. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE2434-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE2434-1) falls outside the range specified in Condition 5 C., the owner or operator shall investigate the Pulse Jet Baghouse (CE2434-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE2434-1) is not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE2434-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routing and long-term maintenance.
- G. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE2434-1).

Authority for Requirement: DNR Construction Permit 02-A-760-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 90
Stack Opening (inches, dia.): 18
Exhaust Flowrate (scfm): 1857
Exhaust Temperature (°F): 98
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 02-A-760-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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)

Emissions Point ID Number: 471.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2437.0	Starch Warehouse, Industrial Modified Starch Bin & Transfer System	Modified Starch	18 tons of starch per hour	Pulse Jet Baghouse (CE2437-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 03-A-079-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.065 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-079-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.171 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-079-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.171 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 03-A-079-S2
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The differential pressure drop across the Pulse Jet baghouse (CE2437-1) shall be maintained between 0.6 and 6 inches water column.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2437-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE2437-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE2437-1) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Pulse Jet Baghouse (CE-2437-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE2437-1) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE2437-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE2437-1).

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 111

Stack Opening (inches, dia.): 16 x 14

Exhaust Flowrate (scfm): 1,400

Exhaust Temperature (°F): 80

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 03-A-079-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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

Monitoring and Recordkeeping satisfy CAM requirements, additional CAM plan not required.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 95.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2416.0	Starch South Bulk Loading: Railcar	Corn Starch	28 tons starch per hour	Pulse Jet Baghouse (CE2416-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 75-A-246-S2
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.10 lb/hr

Authority for Requirement: DNR Construction Permit 75-A-246-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.26 lb/hr

Authority for Requirement: DNR Construction Permit 75-A-246-S2

Pollutant: Particulate Matter

Emission Limit(s): 0.26 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 75-A-246-S2
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. This emissions unit is currently not in operation. No later than thirty (30) days prior to the anticipated startup date of the emissions unit (EU2416.0), the owner or operator shall provide a written notification to the Stack Test Coordinator on the startup date of the emissions unit (EU2416.0) in accordance with General Condition G30.
- B. Within 90 days after the startup of the emissions unit (EU2416.0), the owner or operator shall install, calibrate and operate equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2416-1) as specified in Conditions C, D, and E below.
 - i. The owner or operator shall maintain a record of the installation date and the operation commencement date of the equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2416-1).
- C. The differential pressure drop across the Pulse Jet Baghouse (CE2416-1) shall be maintained between 1 and 6 inches water column.
- D. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2416-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- E. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE2416-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE2416-1) falls outside the range specified in Condition C above, the owner or operator shall investigate the Pulse Jet Baghouse (CE2416-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE2416-1) is not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE2416-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- G. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE2416-1).

Authority for Requirement: DNR Construction Permit 75-A-246-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 64

Stack Diameter (inches, dia.): 18

Exhaust Flowrate (scfm): 6,000

Exhaust Temperature (°F): 90

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 75-A-246-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance test	One-Time ⁽¹⁾⁽³⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀	Performance test	One-Time ⁽¹⁾⁽²⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance test	One-Time ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽¹⁾The required performance tests shall be conducted when the bulk railcar loadout (EU2416.0) is in operation.

⁽²⁾ It is acceptable to test for PM and to assume that all PM emissions are PM₁₀ emissions.

⁽³⁾ If method 40 CFR 51, Appendix M, 201A cannot be performed due to stack blockage, then the owner operator shall add a temporary stack extension to perform method 40 CFR 51, Appendix M, 201A. The temporary stack extension shall conform to 40 CFR Part 60, Appendix A, Method 1.

Authority for Requirement – DNR Construction Permit 75-A-246-S2

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

Agency Approved Operation & Maintenance Plan Required?

Yes No

Facility Maintained Operation & Maintenance Plan Required?

Yes No

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 60.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2415.0	Starch Quonset Bulk Loadout – Track 3/4 N: Loading Conveyor and Railcar Loading	Starch	30 tons starch/hour	Pulse Jet Baghouse (CE2415-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 02-A-952-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.068 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-952-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.18 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-952-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.18 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 02-A-952-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. This emissions unit is currently not in operation. No later than thirty (30) days prior to the anticipated startup date of the emissions unit (EU2415.0), the owner or operator shall provide a written notification to the Stack Test Coordinator on the startup date of the emissions unit (EU2415.0) in accordance with General Conditions G30.
- B. Within 90 days after the startup of the emissions unit (EU2415.0), the owner or operator shall install, calibrate and operate equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2415-1) as specified in Conditions C, D, and E below.
 - i. The owner or operator shall maintain a record of the installation date and the operation commencement date of the equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2415-1).
- C. The differential pressure drop across the Pulse Jet Baghouse (CE2415-1) shall be maintained between 1 and 6 inches water column.
- D. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2415-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- E. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE2415-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE2415-1) falls outside the range specified in Condition C above, the owner or operator shall investigate the Pulse Jet Baghouse (CE2415-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE2415-1) is not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE2415-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- G. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE2415-1).

Authority for Requirement: DNR Construction Permit 02-A-952-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height (ft, from the ground): 48
- Stack Opening (inches, dia.): 12
- Exhaust Flowrate (cfm): 4,200
- Exhaust Temperature (°F): Ambient
- Discharge Style: Horizontal
- Authority for Requirement: DNR Construction Permit 02-A-952-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance test	One-Time ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀	Performance test	One-Time ⁽¹⁾⁽²⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance test	One-Time ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽¹⁾ If method 40 CFR 51, Appendix M, 201A cannot be performed due to stack blockage, then the owner operator shall add a temporary stack extension to perform method 40 CFR 51, Appendix M, 201A. The temporary stack extension shall conform to 40 CFR Part 60, Appendix A, Method 1.

⁽²⁾ It is acceptable to test for PM and to assume that all PM emissions are PM₁₀ emissions.

Authority for Requirement – DNR Construction Permit 02-A-952-S1

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

Agency Approved Operation & Maintenance Plan Required?

Yes No

Facility Maintained Operation & Maintenance Plan Required?

Yes No

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 163.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2432.0	Starch WHSE, Track #3A Loadout	Starch	50 tons starch/hour – conveyor system, 40 tons starch/hour – railcar loading	Pulse Jet Baghouse (CE2437-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% (1)

Authority for Requirement: DNR Construction Permit 90-A-263-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-263-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.41 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-263-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.41 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 90-A-263-S2
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The differential pressure drop across the Pulse Jet Baghouse (CE2432-1) shall be maintained between 1 and 6 inches water column.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE2432-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE2432-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE2432-1) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Pulse Jet Baghouse (CE2432-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE2432-1) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE2432-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE2432-1).

Authority for Requirement: DNR Construction Permit 90-A-263-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 114
Stack Opening (inches, dia.): 20
Exhaust Flowrate (scfm): 3,914
Exhaust Temperature (°F): 74
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 90-A-263-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance test	Once every 5 calendar years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀	Performance test	Once every 5 calendar years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance test	Once every 5 calendar years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽¹⁾ Performance testing for PM, PM₁₀, and PM_{2.5} shall be conducted once every 5 calendar years.

Authority for Requirement: DNR Construction Permit 90-A-263-S2

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

Agency Approved Operation & Maintenance Plan Required?

Yes No

Facility Maintained Operation & Maintenance Plan Required?

Yes No

Compliance Assurance Monitoring (CAM) Plan Required?

Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 188.0

Associated Equipment

Table: G Starch; G-Starch Process

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
2501.0	Ingredient Bin #1 and #2; Super Sack Bag Dump Stations #1 and #2	Extruded Starch	76,000 lb/bin	Industrial Ingredients Receiving Baghouse (CE2501-1)
2502.0	Ingredient Bin #3 and #4; Super Sack Bag Dump Stations #1 and #2		76,000 lb/bin	Food-Grade Ingredients Receiving Baghouse (CE2501-2)
2503.0	Food Product Bin #1; Product Bin #2		250,000 lb/bin	Food-Grade Product Receiving Baghouse (CE2501-4)
2504.0	Product Bin #2; Industrial Product Bin #3		250,000 lb/bin	Industrial Product Receiving Baghouse (CE2501-3)
2505.0	Steam Heated Indirect Dryer and Cooler, and various pickup points-Product Bin Area, Ingredient Bin Area, Super Sack Dump and Ingredient Blender Area, Grinder and Screener Areas		4,250 lb/hr	#1 Dust Collection Baghouse (CE2501-5)
2506.0	Ingredient Blender, Screener #1, Extruder, Grinder Feed Bin, Grinder, and various pick up points-Packaging & Bulk Loadout Areas-Railcar and Truck		20,000 lb/hr	#2 Dust Collection Baghouse (CE2501-6)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 96-A-1028-S2
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.774 lb/hr

Authority for Requirement: DNR Construction Permit 96-A-1028-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 2.06 lb/hr

Authority for Requirement: DNR Construction Permit 96-A-1028-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.06 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 96-A-1028-S2
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 9.0 lb/hr

Authority for Requirement: DNR Construction Permit 96-A-1028-S2

Operating Requirements with Associated Monitoring and Recordkeeping

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

Operating Limits

- A. The differential pressure drop across each baghouse specified in Table 1: Baghouse List shall be maintained between 1 and 6 inches water column while the equipment is in operation.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across each baghouse specified in Table 1: Baghouse List. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer’s recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall develop an operating and maintenance plan for each baghouse specified in Table 1: Baghouse List including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

Table 1: Baghouse List
Industrial Ingredients Receiving Baghouse (CE2501-1)
Food-Grade Ingredients Receiving Baghouse (CE2501-2)
Industrial Product Receiving Baghouse (CE2501-3)
Food-Grade Product Receiving Baghouse (CE2501-4)
#1 Dust Collection Baghouse (CE2501-5)
#2 Dust Collection Baghouse (CE2501-6)

Reporting & Record keeping

- A. The owner or operator shall collect and record the pressure drop across each baghouse specified in Table 1 in inches of water, once per day. If the pressure drop across any baghouse specified in Table 1: Baghouse List falls outside the range specified in Operating Limits condition A. above, the owner or operator shall investigate the baghouse and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken for each baghouse specified in Table 1: Baghouse List. This requirement shall not apply on the days that a baghouse is not in operation.
- B. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of each baghouse specified in Table 1.

Authority for Requirement: DNR Construction Permit 96-A-1028-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 140.0
Stack Opening (inches, dia.): 54
Exhaust Flowrate (scfm): 60,000
Exhaust Temperature (°F): 90
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 96-A-1028-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 472.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1068.0	Five (5) Alcohol Prefermenters	Corn Mash	69,000 gal/hr (combined)	Packed Bed Scrubber, CE 1068-1

Applicable Requirements

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

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

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 8.5 lb/hr; 37.2 tons/yr

Authority for Requirement: DNR Construction Permit 03-A-342-S2

Operating Requirements with Associated Monitoring and Recordkeeping

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

Operating Limits

- A. The equipment (as defined in 40 CFR §60.481) associated with this emission unit shall meet the standards specified in NSPS Subpart VV (40 CFR §60.480 – 40 CFR §60.489).
- B. The total grind for the facility (plant number 70-01-004) is limited to 62.050 million bushels of corn per twelve (12) month rolling period.
- C. The flow rate of the scrubber water in the packed bed scrubber, CE 1068-1, shall be maintained at a minimum flow rate of 30 gallons per minute.

Reporting & Record keeping

- A. Reporting and recordkeeping for NSPS Subpart VV shall be done per 40 CFR 60.486 and 40 CFR 60.487.
- B. Record the cumulative amount of corn grind for the facility (plant number 70-01-004) on a rolling 12-month basis for each month of operation.
- C. Record hourly the flow rate of the scrubber water in the packed bed scrubber, CE 1068-1.

Authority for Requirement: DNR Construction Permit 03-A-342-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 61.5
Stack Opening (inches, dia.): 24
Exhaust Flowrate (scfm): 4,800
Exhaust Temperature (°F): 80
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-342-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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

Monitoring and Recordkeeping requirements satisfy CAM. No CAM plan required.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Distillation Column Vents

Associated Equipment

Table: Distillation Column Vents

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (Mgal/hr)
501.0	1082.0	#1 Beer Column - Vent	Ethanol	24.0
505.0		#1 Beer Column – Degasifier Vent	Ethanol	
502.0	1083.0	#2 Beer Column - Vent	Ethanol	24.0
506.0		#2 Beer Column – Degasifier Vent	Ethanol	
509.0		#2 Beer Column Reflux Vent	Ethanol	
503.0	1084.0	#3 Beer Column - Vent	Ethanol	24.0
507.0		#3 Beer Column – Degasifier Vent	Ethanol	
504.0	1085.0	#4 Beer Column - Vent	Ethanol	24.0
508.0		#4 Beer Column – Degasifier Vent	Ethanol	

Applicable Requirements

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

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

See "Plant-Wide Conditions" for plant-wide emission limits.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Beer Well Tanks

Associated Equipment

Table: Beer Well Tanks

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (gallons)
480.0	1072.0	Beer Well Tank #1	Fermented Corn Mash	272,590
481.0	1073.0	Beer Well Tank #2	Fermented Corn Mash	272,590
482.0	1074.0	Beer Well Tank #3	Fermented Corn Mash	272,590

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.

See "Plant-Wide Conditions" for plant-wide emission limits.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 475.0, 484.0, 486.0, 487.0

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
475.0	1066.0	Demethylization Feed Tank	Ethanol	4,320 gal/hr	None
484.0	1076.0	Demethylization System Vent Condenser No.1	Ethanol	4,200 gal/hr	None
486.0	1078.0	Anhydrous Product Vent Condenser #2	Ethanol	3,500 gal/hr	None
487.0	1079.0	Anhydrous Vacuum Receiver Vent #2	Ethanol	4,200 gal/hr	None

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

See "Plant-Wide Conditions" for plant-wide emission limits.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. Determine the annual throughput (in gallons/yr) on a rolling 12-month basis for each month of operation.

Authority for Requirement: DNR Construction Permits 02-A-792, 02-A-793, 02-A-795, 02-A-796

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

Emission Point Number	Emission Unit Number	Stack Height (ft, from the ground)	Stack Opening (inches, dia.)	Exhaust Flowrate (scfm)	Exhaust Temperature (F)	Discharge Style
475.0	1066.0	35	6	Displacement	75	Vertical Obstructed
484.0	1076.0	25	12x4	Displacement	70	Vertical Obstructed
486.0	1078.0	29	2	Displacement	75	Downward
487.0	1079.0	29	2	Displacement	75	Downward

Authority for Requirement: DNR Construction Permits 02-A-792, 02-A-793, 02-A-795, 02-A-796

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 408.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1012.0	Mole Sieve #1 Feed Tank	Ethanol	12,084 gallons	None

Applicable Requirements

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

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

See "Plant-Wide Conditions" for plant-wide emission limits.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. Record each month the throughput of the Mole Sieve #1 Feed Tank.
- B. Each month calculate the VOC emissions from the Mole Sieve #1 Feed Tank. Calculate and record 12-month rolling VOC totals.
- C. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart VV, 40 CFR 60.486 and 40 CFR 60.487.

Authority for Requirement: DNR Construction Permit 07-A-1168

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height (ft, from the ground): 20
- Stack Opening (inches, dia.): 8
- Exhaust Flowrate (scfm): 25
- Exhaust Temperature (°F): Ambient
- Discharge Style: Obstructed vertical
- Authority for Requirement: DNR Construction Permit 07-A-1168

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 309.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1065.0	Fuel Ethanol Production – Fugitive Acetaldehyde Emission (Equipment Leaks of VOC)	Alcohol	NA	None

Applicable Requirements

New Source Performance Standards (NSPS)

The following subparts apply to the emission unit(s) in this permit:

This facility is subject to the requirements and conditions of Standards of Performance for Equipment Leaks of VOC In the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 as specified in 40 CFR Part 60 §60.480.

This facility is also subject to the requirements and conditions of NSPS Subpart A-*General Provisions*.

Authority for Requirement: 40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"
40 CFR 60 Subpart A
567 IAC 23.1(2)
567 IAC 22.108(3)

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The following subparts apply to the emission unit(s) in this permit:

This facility is subject to 40 CFR Part 63, Subpart A – *General Provisions* (40 CFR §63.1 through 40 CFR §63.15) of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and Subpart FFFF – *Miscellaneous Organic Chemical Manufacturing* (40 CFR §63.2430 through 40 CFR §63.2550) and are also subject to the requirements of 567 IAC 23.1(4)"cf".

Authority for Requirement: 40 CFR Part 63 Subpart FFFF
567 IAC 23.1(4)"cf"
40 CFR Part 63 Subpart A
567 IAC 23.1(4)
567 IAC 22.108(3)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The component count shall be documented as to the number and types of components used. Components include but are not limited to valves, pumps, compressor seals, flanges, etc. The component count shall be updated as the component count varies.
- B. The owner/operator shall follow the applicable standards of NSPS Subpart VV, 40 CFR 60.480 through 40 CFR 60.489.

Authority for Requirement: 567 IAC 22.108(3)

Reporting & Recordkeeping

- A. The owner or operator shall keep records as required in 40 CFR 60.486 and reports as required in 40 CFR 60.487.
- B. The owner or operator shall comply with all reporting, notification, and recordkeeping requirements as specified in 40 CFR Part 60 Subpart VV- Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry, specifically §60.486 and §60.487.
- C. The owner or operator shall comply with all reporting, notification, and recordkeeping requirements as specified in 40 CFR Part 60 Subpart A General Provisions §§60.1 through 60.19.
- D. Document the component count as to the number and types of components used. Components include but are not limited to valves, pumps, compressor seals, flanges, etc. The component count shall be updated as the component count varies.

Authority for Requirement: 567 IAC 22.108(3)

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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

Emission Point ID Number: See Table: Alcohol Storage Tanks

Associated Equipment

Table: Alcohol Storage Tanks

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (gallons)
400.0	1005.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 1	Ethanol	13,145
401.0	1006.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 2	Ethanol	13,145
402.0	1007.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 3	Ethanol	13,816
403.0	1008.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 4	Ethanol	16,075
404.0	1009.0	Storage of Reject Anhydrous Alcohol, Ethanol – Dump Tank	Ethanol	16,075
405.0	1010.0	Storage of Anhydrous Alcohol, Ethanol – Ethanol Tank 6	Ethanol	16,075
406.0	1011.0	Storage of Reject Anhydrous Alcohol, Ethanol – Dump Tank	Ethanol	8,568
409.0	1014.0	Storage of Anhydrous Alcohol, Ethanol – "A" Scale Tank	Ethanol	11,374
410.0	1015.0	Storage of Anhydrous Alcohol, Ethanol – "B" Scale Tank	Ethanol	11,552
411.0	1016.0	Storage of Anhydrous Alcohol, Ethanol – "C" Scale Tank	Ethanol	11,915
413.0	1018.0	Storage of Toluene	Toluene	4,283
445.0	1050.0	Storage of Anhydrous Alcohol, Ethanol Tank 3H	Ethanol	433,959
446.0	1051.0	Storage of Anhydrous Alcohol, Ethanol Tank 4H	Ethanol	433,959
448.0	1053.0	Storage of Anhydrous Alcohol, Ethanol Tank 6H	Ethanol	433,959
450.0	1055.0	Storage of Anhydrous Alcohol, Ethanol Tank 8H	Ethanol	433,959
451.0	1056.0	Storage of Ethanol Tank 1C	Ethanol	272,291
452.0	1057.0	Storage of Ethanol Tank 2C	Ethanol	272,291
453.0	1058.0	Storage of Ethanol Tank 3C	Ethanol	272,291
459.0	1064.0	Storage of Ethanol – 160 Proof Tank	Ethanol	32,149

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

See "Plant-Wide Conditions" for plant-wide emission limits.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 321.0, 447.0, 449.0

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	Construction Permit
321.0	1115.0	Clean Alcohol Barge Loadout (Beverage)	Ethanol	1,000 gallons of ethanol per minute	None	19-A-134-S1
447.0	1052.0	B storage tank Farm 5H	Ethanol	433,959 gallons	None	19-A-137
449.0	1054.0	B storage tank Farm 7H	Ethanol	433,959 gallons	None	19-A-138

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

See "Plant-Wide Conditions" for plant-wide emission limits.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits for Emission Unit 1115.0

- A. The owner or operator is limited to loading only beverage-grade ethanol and denatured ethanol from Clean Barge Loading area (EU1115.0). Prior to loading out different material in Clean Barge Loading area (EU1115.0), the owner or operator shall apply for, and obtain, a modified construction permit from the Department.
- B. The total amount of ethanol loaded out in Clean Barge Loading area (EU1115.0) is limited to a maximum of 23.0 million gallons in any 12-month rolling period.
- C. The total amount of VOC containing denaturant or additive loaded out in Clean Barge Loading area (EU1115.0) is limited to a maximum of 229, 500 gallons in any 12-month rolling period. This restriction does not apply to any denaturant or additive loaded out in Clean Barge Loading area (EU1115.0) that does not contain VOCs.

- D. The vapor pressure of any denaturant or additive that contains VOC loaded out in Clean Barge Loading area (EU1115.0) shall not exceed 10.0 psia measured at 60°F.
- i. The owner or operator shall maintain a record of the vapor pressure at 60°F of each denaturant or additive that contains VOC loaded out in Clean Barge Loading area (EU1115.0) in psia.
- E. The Molecular Weight (MW) of any denaturant or additive that contains VOC loaded out in Clean Barge Loading area (EU1115.0) shall not exceed 150.
- i. The owner or operator shall maintain a record of the Molecular Weight (MW) of each denaturant or additive that contains VOC loaded out in Clean Barge Loading area (EU1115.0).
- F. The owner or operator shall maintain the following records for Clean Barge Loading area (EU1115.0) on each denaturant or additive that contains VOC for each barge loaded:
- i. The name of any denaturant or additive loaded out with ethanol;
 - ii. The Safety Data Sheet or manufacturer's data sheet that provides the physical properties of the denaturant or additive;
 - iii. Identification on whether the denaturant or additive contains VOC and HAP;
 - iv. The total amount of denaturants or additives loaded out in gallons;
 - v. The total amount of ethanol loaded out in gallons
- G. The owner or operator shall maintain the following monthly records for this emissions unit (EU1115.0):
- i. The amount of ethanol loaded out into barges (gallons); and
 - ii. The amount of additive or denaturant loaded out into barges (gallons)
 - iii. The rolling 12-month total of the amount of ethanol loaded out into barges (gallons).
 - iv. The rolling 12-month total of the amount of additive or denaturant loaded out into barges (gallons).

Authority for Requirement: DNR Construction Permit 19-A-134-S1

Operating Limits for Emission Unit 1052.0 and 1054.0

- A. The owner or operator is limited to storing only beverage-grade ethanol in B storage tank Farm 5H (EU1052.0) and 7H (EU1054.0). Prior to storing a different material in this emissions unit (EU1052.0) and 7H (EU1054.0), the owner or operator shall apply for, and obtain, a modified construction permit from the Department.
- B. The owner or operator shall keep a record of the type of material stored in B storage tank Farm 5H (EU1052.0) and 7H (EU1054.0).
- C. The owner or operator shall record annually, the net material throughput in gallons.

Authority for Requirement: DNR Construction Permit 19-A-137, 19-A-138

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Emission Point	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
321.0	10	Vertical, Unobstructed	*	Ambient	Working & Breathing Loss
447.0	42	Vertical, Obstructed	8	Ambient	Working & Breathing Loss
449.0	42	Vertical, Obstructed	8	Ambient	Working & Breathing Loss

*This operation does not vent emissions through a vent or stack and discharge opening vary with barge size.

Authority for Requirement: DNR Construction Permit 76-A-262-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 555.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
113.0	#1 Purification Column Feed Tank	Alcohol	56,400 gallons (storage), 16,750 gallons of ethanol per hour	Internal Floating Roof (CE1130-1)

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.

See "Plant-Wide Conditions" for plant-wide emission limits.

New Source Performance Standards (NSPS)

The following subparts apply to #1 Purification Column Feed Tank (EU113.0) in this permit.

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
113.0	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	NA	23.1(2)"ddd"	§60.110b-§60.117b

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The following subpart apply to the alcohol production operations at Grain Processing Corporation (Plant No. 70-01-004). This subpart does not apply to operations, equipment and operating periods associated with beverage grade alcohol production only. In cases, when equipment used to produce non-beverage alcohol and equipment used to produce common alcohol feedstock for both beverage and non-beverage alcohol production such as Mash Fermenters Nos. 24-33 (EU6324.0-EU6333.0), the following subpart applies.

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
113.0	A	General Provisions	NA	23.1(4)	§63.2540 (Table 12)
	FFFF	Miscellaneous Organic Chemical Manufacturing	(1), (2), (3)	23.1(4)"cf"	§63.2435 – §63.2550

- (1) The owner or operator shall determine if this equipment is subject to the requirements of the NESHAP Miscellaneous Organic Chemical Manufacturing.
- (2) The owner or operator shall determine if this equipment considered a group 1 or group 2 storage tank in accordance with the definition in §63.2550. This equipment shall be considered new affected sources for purposes of this subpart.
- (3) As specified in §63.2470(a) the owner or operator must meet each emission limit in Table 4 that applies to 1 Purification Column Feed Tank (EU113.0) and must meet each applicable requirement §63.2470 (b) through §63.2470 (e).

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall record and report as specified in 40 CFR Part 60 §60.115b(a) *Reporting and recordkeeping requirements*.
- B. The owner or operator shall record as specified in 40 CFR Part 60 §60.116b(a), the owner or operator shall keep copies of all records required by §60.11b(b) for the life of the source.
- C. The owner or operator shall record as specified in 40 CFR Part 60 §60.116b(b), the owner or operator shall keep readily accessible records showing the dimension of the storage vessel and analysis showing the capacity of the vessel.
- D. As specified in 40 CFR Part 60 §60.116b(c), the owner or operator shall maintain a record of the VOL (volatile organic liquid) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
- E. The owner or operator shall record annually, the net material throughput in gallons.
- F. The owner or operator shall develop an operating and maintenance plan for the Internal Floating Roof (CE1130-1), including a preventative maintenance schedule that is

consistent with the manufacturer's instructions for routine and long-term maintenance.

- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Internal Floating Roof (CE1130-1).

Authority for Requirement: DNR Construction Permit 17-A-111

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 28

Stack Opening (inches, dia.): 12 x 24

Exhaust Flowrate (cfm): Working & Breathing Loss

Exhaust Temperature (°F): 80

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 17-A-111

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 556.0

Associated Equipment

Emission Unit	Emission Unit Description	Maximum Capacity	Control Equipment		
6324.0	Mash Fermenter No. 24	200,000 gallons of capacity, each tank;	Primary Impinjet/ Packed Bed Scrubber (CE6301-1)	Secondary Packed Bed Scrubber (CE6301-2)	Regenerative Thermal Oxidizer (RTO) (CE6301-3), Maximum Heat Input: 1.5 MMBTU/hr, natural gas fired only
6325.0	Mash Fermenter No. 25				
6326.0	Mash Fermenter No. 26				
6327.0	Mash Fermenter No. 27	45,000 gallons of corn mash per hour, each tank			
6328.0	Mash Fermenter No. 28				
6329.0	Mash Fermenter No. 29				
6330.0	Mash Fermenter No. 30	800,000 gallons of capacity, each tank;			
6331.0	Mash Fermenter No. 31				
6332.0	Mash Fermenter No. 32	120,000 gallons of corn mash per hour, each tank			
6333.0	Mash Fermenter No. 33				
1072.0	Beer Well A	120,000 gallons of beer per hour, each beer well			
1073.0	Beer Well B				
1074.0	Beer Well D				

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 Point 556.0

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-112-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.20 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-112-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.20 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-112-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.20 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 17-A-112-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.0 lb/hr, 500 ppm_v
Authority for Requirement: DNR Construction Permit 17-A-112-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 3.0 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-112-S1

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.60 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-112-S1

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 6.0 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-112-S1

Other Limits – Mash Fermenters 24-33

Pollutant: Particulate Matter (PM_{2.5})
Emission Limit(s): 0.185 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-112-S1

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.49 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-112-S1

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.258 lb/hr (RACT Limit)
Authority for Requirement: DNR Construction Permit 17-A-112-S1

Emission Limits - National Emission Standard for Hazardous Air Pollutants

Pollutant: Total Organic HAP
Emission Limit(s): Table 1 to Subpart FFFF of Part 63 for a Group 1 continuous process vent
Authority for Requirement: DNR Construction Permit 17-A-112-S1
567 IAC 23.1(4)"cf"

New Source Performance Standards (NSPS)

The following subparts apply to equipment that are in VOC service located at the: alcohol production operations at Grain Processing Corporation (Plant No. 70-01-004). As specified in 60.481a, equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart. As specified in 60.481a, in VOC service means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. As specified in §60.480a(4), this subpart does not apply to equipment associated with beverage grade alcohol production only. In cases, when equipment used to produce non-beverage alcohol and equipment used to produce common alcohol feedstock for both beverage and non-beverage alcohol production, the following subparts applies

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
Equipment Leaks	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	VVa	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	NA	23.1(2)"nn"	§60.480a-60.489a

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The following subpart apply to the alcohol production operations at Grain Processing Corporation (Plant No. 70-01-004). This subpart does not apply to operations, equipment and operating periods associated with beverage grade alcohol production only. In cases, when equipment used to produce non-beverage alcohol and equipment used to produce common alcohol feedstock for both beverage and non-beverage alcohol production such as Mash Fermenters Nos. 24-33 (EU6324.0-EU6333.0), the following subpart applies.

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
Fermentation Equipment; Equipment Leaks	A	General Provisions	NA	23.1(4)	§63.1 – §63.15
	FFFF	Miscellaneous Organic Chemical Manufacturing	(1)(2)	23.1(4)"cf"	§63.2435 – §63.2550
			(3)		

- (1) The Fermentation equipment is considered a *continuous operation* in accordance with the definition in §63.2550. This equipment shall be considered new and reconstructed affected sources for purposes of this subpart.
- (2) As specified in §63.2455(a), the owner or operator must meet each emission limit in Table 1 to this subpart that applies to the continuous process vents and must meet any applicable requirement from §63.2455(b) and §63.2455(c).

- (3) As specified in §63.2480(a), the owner or operator must meet each requirement in Table 6 to this subpart that applies to equipment leaks except as specified in paragraphs §§63.2480(b) through 63.2480(f).

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

NESHAP Subpart FFFF Requirements

- A. Per CFR §63.2450(a) and as indicated in §63.2455, the owner or operator of equipment associated with continuous process vents as defined in §63.2550 shall comply with the applicable emission limits and work practice standards in Table 1 to Subpart FFFF at all times.
- B. As required by 40 CFR §63.2450(e)(1), the owner or operator reducing organic HAP emissions through a closed-vent system to any combination of control devices (except a flare) shall comply with the applicable requirements in §63.982(c) of Subpart SS and the requirements referenced therein, including
- §63.988, Incinerators, boilers, and process heaters.*
- C. In accordance with 40 CFR §63.2450(e) of Subpart FFFF and as indicated in 40 CFR §63.982(c) of Subpart SS, the owner or operator shall comply with the applicable recordkeeping requirements in 40 CFR §63.998 of Subpart SS and with the reporting requirements in 40 CFR §63.999 of Subpart SS for control devices used in closed vent systems.
- D. The owner or operator shall comply with all applicable reporting, notification, and recordkeeping requirements as specified in 40 CFR Part 63, Subpart FFFF, specifically §63.2515, §63.2520, and §63.2525.

Control Equipment Monitoring

- E. Notwithstanding the operating limits established in the permit Conditions 5.F. through 5.K., the owner or operator shall also comply with all applicable control equipment monitoring requirements from 40 CFR Part 63, Subparts FFFF and SS.
- F. The total liquor flowrate of the Primary Packed Bed Scrubber (CE6301-1) shall be maintained at or above 19 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Primary Packed Bed Scrubber (CE6301-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to the Primary Packed Bed Scrubber (CE6301-1), in gallons per minute, at least once per day. If the

total liquor flow rate to the Primary Packed Bed Scrubber (CE6301-1) falls below the value specified in Condition 5.F., the owner or operator shall investigate the Primary Packed Bed Scrubber (CE 6301-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Primary Packed Bed Scrubber (CE6301-1) is not in operation.

- G. The owner or operator shall develop an operating and maintenance plan for the Primary Packed Bed Scrubber (CE 6301-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Primary Packed Bed Scrubber (CE6301-1).
- H. The total liquor flowrate of the Secondary Packed Bed Scrubber (CE6301-2) shall be maintained at or above 61 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Secondary Packed Bed Scrubber (CE6301-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to the Secondary Packed Bed Scrubber (CE6301-2), in gallons per minute, continuously. If the total liquor flow rate to the Secondary Packed Bed Scrubber (CE6301-2) falls below the value specified in Condition 5.H., the owner or operator shall investigate the Secondary Packed Bed Scrubber (CE6301-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Secondary Packed Bed Scrubber (CE6301-02) is not in operation.
- I. Except as allowed by Condition 5.I.(3), the differential pressure drop across the Secondary Packed Bed Scrubber (CE6301-2) shall be maintained between 1 and 9 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Secondary Packed Bed Scrubber (CE6301-2). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Secondary Packed Bed Scrubber (CE6301-2), in inches of water, continuously. If the pressure drop across the Packed Bed Scrubber (CE6301-2) falls outside the range specified in Condition 5.I., the owner or operator shall investigate the Secondary Packed Bed Scrubber (CE6301-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Secondary Packed Bed Scrubber (CE6301-2) is not in operation.
 - iii. The Secondary Packed Bed Scrubber (CE6301-2) may be operated outside the pressure drop range in Condition 5.I. if the beer well feed rate is less than 650 gallons

of beer per minute, and provided the following monitoring conditions are met:

- a. The owner or operator shall properly operate and maintain equipment to monitor the flow of beer into the beer wells. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - b. The owner or operator shall collect and record the flow of beer in the beer wells, in gallons per minute, continuously.
- J. The owner or operator shall develop an operating and maintenance plan for the Secondary Packed Bed Scrubber (CE6301-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Packed Bed Scrubber (CE6301-2).
- K. The owner or operator shall maintain a Regenerative Thermal Oxidizer (CE6301-3) combustion chamber temperature to no less than 1600 degrees Fahrenheit, based on a 3-hour block average.
- i. The owner or operator shall properly operate and maintain equipment to monitor the combustion chamber temperature of the Regenerative Thermal Oxidizer (CE6301-3). The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals or per written facility specific operating and maintenance plan.
 - ii. The owner or operator shall collect and record the combustion chamber temperature of the Regenerative Thermal Oxidizer (CE6301-3), in °F on a continuous basis. The owner or operator shall calculate and record the 3-hour block average of the combustion chamber in °F. If the 3-hour block average combustion chamber temperature of the Regenerative Thermal Oxidizer (CE6301-3) falls below the value specified in Condition 5.K., the owner or operator shall investigate the Regenerative Thermal Oxidizer (CE6301-3) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Regenerative Thermal Oxidizer (CE6301-3) is not in operation.
- L. The owner or operator shall combust only natural gas or process off-gases in the Regenerative Thermal Oxidizer (CE6301-3). Prior to burning any other gases, the owner or operator shall obtain a modification to this construction permit.
- M. The owner or operator shall develop an operating and maintenance plan for the Regenerative Thermal Oxidizer (CE6301-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any actions resulting from the inspection and maintenance of the Regenerative Thermal Oxidizer (CE6301-3).
- N. The owner or operator shall vent all equipment to the control equipment specified in the associated equipment list above at all times when the equipment is exhausting to the

atmosphere. This condition is not applicable when the equipment is not in operation.

Authority for Requirement: DNR Construction Permit 17-A-112-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 110

Stack Opening (inches, dia.): 30

Exhaust Flowrate (cfm): 13,089

Exhaust Temperature (°F): 274

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 17-A-112-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Performance Testing ⁽¹⁾	Initial ⁽¹⁾ and once every 3 calendar years ⁽²⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM ₁₀	Performance Testing ⁽¹⁾⁽³⁾	Initial ⁽²⁾ and once every 3 calendar years ⁽³⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM _{2.5}	Performance Testing ⁽¹⁾⁽⁴⁾	Initial ⁽²⁾ and once every 3 calendar years ⁽³⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
VOC	Performance Testing ⁽¹⁾	Initial ⁽²⁾ and once every 3 calendar years ⁽³⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP	Performance Testing ⁽¹⁾	Initial ⁽²⁾	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

- (1) Compliance testing shall be conducted when Mash Fermenters Nos. 24-33 are exhausting to the atmosphere through EP556.0 at the maximum exhaust flow rate.
- (2) Initial testing shall be conducted by no later than 180 days from the issuance date of the permit.
- (3) After the initial performance test required by this permit, performance testing shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the emission limits in Condition 1, the owner or operator may request to modify the performance testing frequency.
- (4) Performance testing may be conducted for total particulate matter to demonstrate compliance with the PM₁₀ and PM_{2.5} limits in permit Condition 1.

Authority for Requirement: DNR Construction Permit 17-A-112-S1

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 407.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1013.0	RD2 Feed Tank	Ethanol	9,967 Gallons	None

Applicable Requirements

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

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

See "Plant-Wide Conditions" for plant-wide emission limits.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The owner or operator shall follow the applicable standards of Subpart VV, 40 CFR 60.480 through 40 CFR 60.489.

Reporting & Record keeping

- A. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.

Authority for Requirement: DNR Construction Permit 07-A-432

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 18
Stack Opening (inches, dia.): 8
Exhaust Flowrate (scfm): NA - vent
Exhaust Temperature (°F): 90
Discharge Style: Downward
Authority for Requirement: DNR Construction Permit 07-A-432

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 549.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1067.0	Tank #7 – Anhydrous Alcohol	Ethanol	41,873 Gallons	Packed Bed Scrubber (CE1067-1)
1080.0	Tank RJ2 – Anhydrous Alcohol	Ethanol	41,873 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.

See "Plant-Wide Conditions" for plant-wide emission limits.

New Source Performance Standards (NSPS)

The following subparts apply to the emission unit(s) in this permit:

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
1067.0 1080.0	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	Kb	Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Tank capacity > 151 m ³ ; max. vapor pressure > 5.2 kPa	23.1(2)"ddd"	§60.110b – §60.117b

Authority for Requirement: DNR Construction Permit 12-A-255-S1
 40 CFR Part 60 Subpart Kb
 567 IAC 23.1(2)"ddd"
 40 CFR Part 60 Subpart A
 567 IAC 23.1(2)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. These emission units are subject to all applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 through 40 CFR §60.19) and Kb (40 CFR §60.110b through 40 CFR §60.117b).
- B. The tanks shall be designed and operated to meet the requirements for a closed vent system and control device as required in 40 CFR §60.112b.
 - i. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessels and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in Subpart VV [40 CFR §60.485(b)].
 - ii. The control device shall be designed and operated to reduce inlet VOC emissions by 95% or greater.
- C. As required by 40 CFR 60.113b(c), the owner or operator of each source that is equipped with a closed vent system and control device as required in §60.112b (a)(3) shall meet the following requirements:
 - i. Submit for approval by the Administrator as an attachment to the notification required by 40 CFR §60.7(a)(1) or, if the facility is exempt from 40 CFR §60.7(a)(1), as an attachment to the notification required by 40 CFR §60.7(a)(2), an operating plan containing the information listed below.
 - a. Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device.
 - b. A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).
 - ii. Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with §60.113b(c)(1), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

- D. These emission units are subject to all applicable recordkeeping, notification and reporting requirements as set forth in NSPS Subparts A (40 CFR§60.1 through 40§60.19) and Kb (40 CFR§60.115b and 40CFR§60.116b). Reporting and recordkeeping shall include keeping the following records:
- i. A copy of the operating plan.
 - ii. A record of the measured values of the parameters monitored in accordance with 40 CFR§60.113b(c)(2).
 - iii. A record that shows the dimension of each storage tank (EU1067.0 and EU1080.0) and an analysis showing the capacity of the tanks. This record shall be maintained for the life of the tanks.
- E. The packed bed scrubber (CE 1067-1) shall use a dole valve rated at a minimum of 5 gallons per minute on the packed bed scrubber water inlet. The valve shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- F. Each day, the owner or operator shall visually inspect and record that the water supply to the packed bed scrubber (CE1067-1) is on and that water is flowing to the scrubber. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
- G. Once each month, the owner or operator shall determine and record the VOC concentration in the vent stack from the scrubber (CE1067-1) with a handheld VOC monitor. A history of VOC determinations will establish baseline VOC concentrations from the scrubber (CE1067-1). Significant deviation from this baseline (+/- 10%) will signal operational problems with the scrubber or equipment that must be investigated and addressed.
- H. The owner or operator shall develop an operating and maintenance plan for the packed bed scrubber (CE1067-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance. This maintenance plan shall include annual inspection and verification of capacity of the scrubber dole valve. This operating and maintenance plan shall be kept on file at the facility.
- I. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the packed bed scrubber (CE1067-1) and the monitoring devices.

Authority for Requirement: DNR Construction Permit 12-A-255-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height (ft, from the ground): 40
- Stack Opening (inches, dia.): 4
- Exhaust Flowrate (scfm): 92
- Exhaust Temperature (°F): 65 to 90
- Discharge Style: Downward
- Authority for Requirement: DNR Construction Permit 12-A-255-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 550.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1059.0	Tank 4C, Fixed roof storage tank	Ethanol	273,000 gallons	John Zink Flare w/ air assist (CE1060-2)
1060.0	Tank 5C, Fixed roof storage tank	Ethanol	273,000 gallons	

Applicable Requirements

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

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

Pollutant: Opacity

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

Authority for Requirement: DNR Construction Permit 14-A-604-S1
567 IAC 23.1(2)"ddd"

⁽¹⁾ In accordance with §60.18(b), the flare shall be designed and operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.22 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-604-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.22 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-604-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 14-A-604-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permit 14-A-604-S1
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.45 tons/yr

Authority for Requirement: DNR Construction Permit 14-A-604-S1

New Source Performance Standards (NSPS)

The following subparts apply to the emission unit(s) in this permit:

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
1060.0 (Tank 5C)	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	Kb	Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	NA	23.1(2)"ddd"	§60.110b – §60.117b

Storage Tank 4C (EU1059.0) is not subject to NSPS Subpart Kb because it was constructed prior to July 23, 1984, and it has not been modified or reconstruction.

Authority for Requirement: DNR Construction Permit 14-A-604-S1
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"
40 CFR Part 60 Subpart A
567 IAC 23.1(2)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The amount of denatured alcohol stored in each storage tank (i.e. Storage Tank 4C and Storage Tank 5C) shall not exceed 35,802,205 gallons in any rolling 12-month period. Prior to storing a different material in the storage tanks, the owner or operator shall apply for, and obtain, a new construction permit from the Iowa DNR.
- B. The owner or operator shall maintain the following monthly records for each storage tank (EU1059.0 and EU1060.0) covered by this permit:
 - i. The amount of denatured ethanol loaded into the storage tank; and
 - ii. The rolling 12-month total of the amount of denatured ethanol loaded.
- C. In accordance with §60.116b(b), the owner or operator shall keep readily accessible records showing the dimension of Tank 5C and an analysis showing the capacity of the tank. This record shall be kept for the life of the tank.

- D. In accordance with §60.112b(a)(3), Storage Tank 5C (EU1060.0) shall be equipped with a closed vent system and control device that meets the following specifications:
- i. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage tank and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, §60.485(b).
 - ii. The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. The flare shall meet the specifications described in the general control device requirements (§60.18) of the General Provisions of the New Source Performance Standards.
- E. The John Zink flare (CE1060-2) is an air-assisted flare. In accordance with §60.18(c)(3)(ii), the net heating value of the gas being combusted shall be 11.2 MJ/scm (300 BTU/scf) or greater. The owner or operator shall maintain records on the net heating value of the gas being combusted in the flare (CE1060-2).
- F. The flare (CE1060-2) shall be operated at all time when emissions from Storage Tank 4C (EU 1059.0) and Storage Tank 5C (EU 1060.0) may be vented to it. In accordance with §60.18(c)(2), the flare (CE1060-2) shall be operated with a flame present at all times. In accordance with §60.18(f)(2), the presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of flame.
- G. In accordance with §60.115b(d), the owner or operator shall meet the following requirements:
- i. Submit a report containing the measurements required by:
 - a. §60.18(f)(1), (visible emissions observation);
 - b. §60.18(f)(4), (actual exit velocity); and
 - c. §60.18(f)(6) (maximum permitted velocity)
 - ii. This report shall be submitted within 6 months of the issuance date of the permit.
 - iii. Maintain records of all periods of operation during which the flare pilot flame is absent.
 - iv. Submit a semiannual report for all periods of operation recorded under permit Condition 5.G.ii. in which the pilot flame was absent. This information may be reported as part of the semiannual monitoring reports required by the facility's Title V operating permit. This information shall be reported by March 31 and September 30 of each year, for the six month periods of July 1 to December 31 and January 1 to June 30, respectively.
- H. The owner or operator shall develop an operating and maintenance plan for the John Zink flare (CE1060-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routing and long-term maintenance.
- I. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the John Zink flare (CE1060-2).

Authority for Requirement: DNR Construction Permit 14-A-604-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height (ft, from the ground): 25
- Stack Opening (inches, dia.): 5.6
- Exhaust Flowrate (scfm): 401
- Exhaust Temperature (°F): 1100
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: DNR Construction Permit 14-A-604-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
Opacity	Performance Test (1)	One-time	See note 1	40 CFR 60, Appendix A, Method 22

⁽¹⁾ Testing shall be done in accordance with the requirements of §60.18(f)(1). The 2-hour test shall be conducted to determine compliance with the visible emissions limitation using Method 22 of 40 CFR Part 60, Appendix A.

Authority for Requirement: DNR Construction Permit 14-A-604-S1

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Tank Farm E

Associated Equipment

Table: Tank Farm E

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (Gallons)	Control Equipment
491.0	1098.0	190 Day Lot Tank #1	Ethanol	51,700	Packed Bed Wet Scrubber: 1098-1
	1099.0	190 Day Lot Tank #2		51,700	
	1100.0	190 Day Lot Tank #3		51,700	
	1101.0	190 Day Lot Tank #4		51,700	
492.0	1102.0	Low Proof Feed Tank	Ethanol	50,000	Internal Floating Roof: 1102-0
493.0	1103.0	High Proof Feed Tank	Ethanol	100,000	Internal Floating Roof: 1103-0
494.0	1104.0	High Wines Tank	Ethanol	100,000	Internal Floating Roof: 1104-0
495.0	1105.0	Low Proof Surge Tank #1	Ethanol	946	Surface Condenser: 1105-1
	1106.0	Low Proof Surge Tank #2		946	
	1107.0	High Proof Surge Tank		7,246	

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Table: Tank Farm E-Emission Limits

Emission Point Number	Emission Unit Number	VOC Limit (lb/hr)	Authority for Requirement
491.0	1098.0	6.07	07-A-433
	1099.0		
	1100.0		
	1101.0		
492.0	1102.0	N/A	07-A-434
493.0	1103.0	N/A	07-A-435
494.0	1104.0	N/A	07-A-436
495.0	1105.0	0.143	07-A-437
	1106.0		
	1107.0		

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Process throughput: For Emission Point 491.0 only

A. These tanks shall be used to store only beverage alcohol.

Authority for Requirement: DNR Construction Permit 07-A-433

Work practice standards: For all Emission Points

A. The owner or operator shall follow the applicable standards of Subpart VV, 40 CFR 60.480 through 40 CFR 60.489.

Authority for Requirement: DNR Construction Permits specified in Table: Tank Farm E-Emission Limits

Reporting & Record keeping - Emission Point 491.0

A. The owner or operator shall keep records of the type of material that is stored in these tanks.

Authority for Requirement: DNR Construction Permit 07-A-433

Reporting & Record keeping – All Emission Points

A. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.

Authority for Requirement: DNR Construction Permits specified in Table: Tank Farm E-Emission Limits

Emission Point Characteristics

These emission points shall conform to the conditions specified in Table: Tank Farm E-Emission Point Characteristics.

Table: Tank Farm E-Emission Point Characteristics

Emission Point Number	Stack Height (ft, from the ground)	Stack Opening (inches, dia.)	Exhaust Flowrate (scfm)	Exhaust Temp. (°F)	Discharge Type	Authority for Requirement
491.0	32	10	200	70	Vertical unobstructed	07-A-433
492.0	22.5	Four 6 x 19	N/A-vent	70	Horizontal	07-A-434
493.0	29	Four 6 x 19	N/A-vent	70	Horizontal	07-A-435
494.0	29	Four 6 x 19	N/A-vent	70	Horizontal	07-A-436
495.0	28	7	1	80	Horizontal	07-A-437

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Authority for Requirement: DNR Construction Permits specified in Table: Tank Farm E-Emission Point Characteristics.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No
For EP 491.0 and 495.0 only.

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)

Emission Point ID Number: 468.0, 469.0

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	Construction Permit
468.0	1125.0	Alcohol Tank Farm E Reject Tank #1	Alcohol	52,900 gallons (storage)	Internal Floating Roof (CE1125.0)	19-A-147-S1
469.0	1126.0	Alcohol Tank Farm E Reject Tank #2	Alcohol	52,900 gallons (storage)	Internal Floating Roof (CE1126.0)	19-A-148-S1

Applicable Requirements

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

The emissions from each of these emission points shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.049 tons/yr

Authority for Requirement: DNR Construction Permit 19-A-147-S1, 19-A-148-S1

New Source Performance Standards (NSPS)

The following subparts apply to EU1125.0 and EU1126.0 in this permit.

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
1125.0, 1126.0	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	NA	23.1(2)"ddd"	§60.110b-§60.117b

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The following subpart apply to the alcohol production operations at Grain Processing Corporation (Plant No. 70-01-004). This subpart does not apply to operations, equipment and operating periods associated with beverage grade alcohol production only. In cases, when equipment used to produce non-beverage alcohol and equipment used to produce common alcohol feedstock for both beverage and non-beverage alcohol production such as Mash Fermenters Nos. 24-33 (EU6324.0-EU6333.0), the following subpart applies.

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
1125.0, 1126.0	A	General Provisions	NA	23.1(4)	§63.2540 (Table 12)
	FFFF	Miscellaneous Organic Chemical Manufacturing	(1), (2), (3)	23.1(4)"cf"	§63.2435 – §63.2550

- (1) The owner or operator shall determine if this equipment considered a group 1 or group 2 storage tank in accordance with the definition in §63.2550. This equipment shall be considered new affected sources for purposes of this subpart.
- (2) As specified in §63.2470(a) the owner or operator must meet each emission limit in Table 4 that applies to 1 Alcohol Tank Farm E Reject Tank #2 (EU1126.0) and must meet each applicable requirement §63.2470 (b) through §63.2470 (e).
- (3) As specified in §63.2535(c), the owner or operator may elect to comply with requirements of subpart FFFF in accordance with 40 CFR part 60 subpart Kb.

The owner or operator shall comply with all reporting, notification, and recordkeeping requirements as specified 40 CFR Part 63 Subpart FFFF, specifically §63.2515, §63.2520, 63.2525.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall record and report as specified in 40 CFR Part 60 §60.115b(a) *Reporting and recordkeeping requirements*.
- B. The owner or operator shall record as specified in 40 CFR Part 60 §60.116b(a), the owner or operator shall keep copies of all records required by §60.11b(b) for the life of the source.
- C. The owner or operator shall record as specified in 40 CFR Part 60 §60.116b(b), the owner or operator shall keep readily accessible records showing the dimension of the storage vessel and analysis showing the capacity of the vessel.
- D. As specified in 40 CFR Part 60 §60.116b(c), the owner or operator shall maintain a record of the VOL (volatile organic liquid) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

- E. The owner or operator shall record annually, the net material throughput in gallons.
- F. The owner or operator shall develop an operating and maintenance plan for the Internal Floating Roof (CE1125.0 and CE1126.0), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Internal Floating Roof (CE1125.0 and CE1126.0).

Authority for Requirement: DNR Construction Permit 19-A-147-S1, 19-A-148-S1

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 25

Stack Opening (inches, dia.): 4

Exhaust Flowrate (cfm): Working & Breathing Loss

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 19-A-147-S1, 19-A-148-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 532.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1048.0	"B" Tank Farm Ethanol Storage Tank 1H	Ethanol	430,000 gallons	Packed Bed Wet Scrubber: 1048-1
1049.0	"B" Tank Farm Ethanol Storage Tank 2H	Ethanol	433,000 gallons	

Applicable Requirements

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

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

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.58 lb/hr; 2.5 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 03-A-343-S4

⁽¹⁾These limits apply to the storage of fuel grade ethanol in tanks 1H and 2H

New Source Performance Standards (NSPS)

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
1048.0 1049.0	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	Kb	Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	NA	23.1(2)"ddd"	§60.110b – §60.117b
	VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	NA	23.1(2) "nn"	§60.480 – §60.489

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The equipment (as defined in 40 CFR §60.481) associated with these emission units shall meet the standards specified in NSPS Subpart VV (40 CFR §60.480 – 40 CFR §60.489).
- B. Per 40 CFR §60.112b each tank shall be equipped with one of the following:
 - A fixed roof in combination with an internal floating roof meeting the specifications listed 40 CFR 60.112b(1).
 - i. An external floating roof meeting the specifications listed in 40 CFR 60.112b(2).
 - ii. A closed vent system and control device meeting the following specifications:
 - a. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in Subpart VV [40 CFR §60.485(b)].
 - b. The control device shall be designed and operated to reduce inlet VOC emissions by 95% or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (40 CFR §60.18) of the General Provisions.
 - iii. A system equivalent to those listed above as provided in 40 CFR §60.114b.
- C. The total grind for the facility (plant number 70-01-004) is limited to 62.050 million bushels of corn per twelve (12) month rolling period.

Reporting & Record keeping

- A. Reporting and recordkeeping for NSPS Subpart Kb shall be done per 40 CFR §60.115b.
- B. Reporting and recordkeeping for NSPS Subpart VV shall be done per 40 CFR §60.486 and 40 CFR §60.487.
- C. During normal daily equipment walk-through, the operator will observe the general exterior condition of the scrubber. Only if there is a problem will the operator make a note in the daily shift log.

- D. Once each month, the effectiveness of the scrubber will be checked by performing the following:
- i. Water flow to the scrubber will be checked and adjusted if necessary to give roughly 0.5 – 1.0 gal/min.
 - ii. VOC concentration in the vent stack from the scrubber will be checked and recorded with a handheld VOC monitor. A history of VOC determinations will establish baseline VOC concentrations from the scrubber. Significant deviation from this baseline (approx +/- 10%) will signal a problem with the scrubber.
- E. The owner or operator shall maintain a record of all inspections of the control equipment. The owner or operator shall document the results of the inspections and note any repairs that were the result of the inspections.
- F. The owner or operator shall perform all recordkeeping that is required in the Department approved Operation and Maintenance Plan for all process equipment and control equipment covered under the construction permit.
- G. Calculate and record the corn total grind on a monthly basis. Calculate and record rolling 12-month total.

Authority for Requirement: DNR Construction Permit 03-A-343-S4,
567 IAC 22.108(3)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 15

Stack Opening (inches, dia.): 6

Exhaust Flowrate (acfm): 16

Exhaust Temperature (°F): 80

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 03-A-343-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: See Table: Alcohol Loadout

Associated Equipment

Table: Alcohol Loadout

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
302.0	1002.0	Alcohol Loading: Methanol Tank	Methanol	9,929 gallons
456.0	1061.0	Storage of Ethanol - Isopropyl Tank	Ethanol	12,129 gallons
457.0	1062.0	Storage of Ethanol - TBA Bulk Tank	Ethanol	19,459 gallons
458.0	1063.0	Storage of Ethanol - Denatured Tank #13	Ethanol	32,149 gallons
476.0	1069.0	Ethanol Denaturant Storage Tank – Tank #1	Ethyl Acetate	2,550 gallons
477.0	1070.0	Ethanol Denaturant Storage Tank – Tank #2	Ethyl Acetate	6,316 gallons
478.0	1071.0	Ethanol Denaturant Storage Tank – Unleaded Gasoline	Unleaded Gasoline	26,438 gallons
539.0	1097.0	Ethanol Denaturant Storage Tank – #2 Unleaded Gasoline	Unleaded Gasoline	7,773 gallons
483.0	1075.0	Alcohol Tank Truck Loadout	Ethanol	7.5 Mgal/hr
520.0	1094.1	Alcohol Track 4A Rail Loadout Spout #1	Ethanol	1.3 Mgal/hr
521.0	1094.2	Alcohol Track 4A Rail Loadout Spout #2	Ethanol	1.3 Mgal/hr
522.0	1094.3	Alcohol Track 4A Rail Loadout Spout #3	Ethanol	1.3 Mgal/hr
523.0	1094.4	Alcohol Track 4A Rail Loadout Spout #4	Ethanol	1.3 Mgal/hr
524.0	1094.5	Alcohol Track 4A Rail Loadout Spout #5	Ethanol	1.3 Mgal/hr
525.0	1094.6	Alcohol Track 4A Rail Loadout Spout #6	Ethanol	1.3 Mgal/hr
526.0	1094.7	Alcohol Track 4A Rail Loadout Spout #7	Ethanol	1.3 Mgal/hr
535.0	1094.10	Alcohol Track 4A Rail Loadout Spout #10	Ethanol	2.9 Mgal/hr
527.0	1095.1	Alcohol Beverage Truck Loadout Spout (East)	Ethanol	7.5 Mgal/hr
528.0	1095.2	Alcohol Anhydrous 200 Truck Loadout Spout	Ethanol	7.5 Mgal/hr
529.0	1095.3	Alcohol 190 Proof (Heads) Truck Loadout Spout	Ethanol	7.5 Mgal/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.

See "Plant-Wide Conditions" for plant-wide emission limits.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 533, 534

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	Construction Permit
533	1094.8	Alcohol Track 4A RLS Arm #8	Alcohol	560 gal/min	Submerged Fill Pipe (CE1094.8-1)	22-A-023
	1094.8B	Alcohol Track 4A RLS Arm #8B		560 gal/min		
534	1094.9	Alcohol Track 4A RLS Arm #9	Alcohol	560 gal/min	Submerged Fill Pipe (CE1094.9-1)	22-A-024
	1094.9B	Alcohol Track 4A RLS Arm #9B		560 gal/min		

Applicable Requirements

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

The emissions from each of these emission points shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 10.3 tons/yr

Authority for Requirement: DNR Construction Permit 22-A-023, 22-A-024

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The following subparts apply to these emission units:

Emission Unit ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
1094.9, 1094.9B	A	General Provisions	NA	23.1(4)	§63.1 – §63.15
	FFFF	Miscellaneous Organic Chemical Manufacturing	NA	23.1(4)“cf”	§63.2430 – §60.2550

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Emission Point 533

- A. Existing Alcohol Track 4A Rail Loading Station (RLS) #8, which consisted of one grandfathered loading arm (EU1094.8), is being modified with the addition of a new loading arm: #8B (EU1094.8B). Due to a physical restriction, only one of the two railcar loading arms (EU1094.8, EU1094.8B) can operate at any one time. Before modifying the loading station RLS #8 to allow more than one arm to operate at any one time, the owner or operator shall obtain a modification to this construction permit.
- B. The materials loaded out in RLS Arm #8B (EU1094.8B) are limited to ethanol and denatured ethanol (i.e. ethanol with an additive). The amount of denaturants or additives that contain VOC loaded out in any railcar in RLS Arm #8B (EU1094.8B) shall not exceed 25% by volume of the total volume of denatured ethanol loaded out. Prior to loading out a different material from ethanol or denatured ethanol in this emission unit, the owner or operator shall obtain a modification to this construction permit.
 - i. The owner or operator shall maintain the following records for EU1094.8B on each denaturant or additive that contains VOC for each railcar loaded:
 - a. The name of any denaturant or additive loaded out with ethanol;
 - b. The Safety Data Sheet or manufacturer's data sheet that provides the physical properties of the denaturant or additive;
 - c. Identification on whether the denaturant or additive is a Hazardous Air Pollutant (HAP);
 - d. The amount of denaturants or additives loaded out in gallons;
 - e. The total amount of denatured ethanol loaded out in gallons; and
 - f. The percentage by volume of the denaturants or additives in the total volume of denatured ethanol loaded out.
- C. The total amount of ethanol and denatured ethanol loaded out in emissions unit EU1094.8B (RLS Arm #8B) is limited to a maximum of 12,264,000 gallons in any 12-month rolling period.
 - i. The owner or operator shall maintain the following monthly records for EU1094.8B:
 - a. The amount of ethanol and denatured ethanol loaded out (gallons); and
 - b. The rolling 12-month total of the amount of ethanol and denatured ethanol loaded out (gallons).

- D. The vapor pressure of any denaturant or additive that contains VOC loaded out in EU1094.8B (RLS Arm #8B) shall not exceed 6.884 psia measured at 60°F. This is based on the vapor pressure of n-pentane (CAS 109-66-0), which is the highest one of the VOC-containing additives currently being used.
 - i. The owner or operator shall maintain a record of the vapor pressure at 60°F of each denaturant or additive that contains VOC loaded out in EU1094.8B (RLS Arm #8B).
- E. The owner or operator shall develop an operating and maintenance plan for the Submerged Fill Pipe (CE1094.8-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Submerged Fill Pipe (CE1094.8-1).

Authority for Requirement: DNR Construction Permit 22-A-023

Emission Point 534

- A. Existing Alcohol Track 4A Rail Loading Station (RLS) #9, which consisted of one loading arm (EU1094.9), is being modified with the addition of a new loading arm: #9B (EU1094.9B). Due to a physical restriction, only one of the two railcar loading arms (EU1094.9, EU1094.9B) can operate at any one time. Before modifying the loading station RLS #9 to allow more than one arm to operate at any one time, the owner or operator shall obtain a modification to this construction permit.
- B. The materials loaded out in RLS Arm #9B (EU1094.9B) are limited to ethanol and denatured ethanol (i.e. ethanol with an additive). The amount of denaturants or additives that contain VOC loaded out in any railcar in RLS Arm #9B (EU1094.9B) shall not exceed 25% by volume of the total volume of denatured ethanol loaded out. Prior to loading out a different material from ethanol or denatured ethanol in this emission unit, the owner or operator shall obtain a modification to this construction permit.
 - i. The owner or operator shall maintain the following records for EU1094.9B on each denaturant or additive that contains VOC for each railcar loaded:
 - a. The name of any denaturant or additive loaded out with ethanol;
 - b. The Safety Data Sheet or manufacturer's data sheet that provides the physical properties of the denaturant or additive;
 - c. Identification on whether the denaturant or additive is a Hazardous Air Pollutant (HAP);
 - d. The amount of denaturants or additives loaded out in gallons.
 - e. The total amount of denatured ethanol loaded out in gallons.
 - f. The percentage by volume of the denaturants or additives in the total volume of denatured ethanol loaded out.

- C. The total amount of ethanol and denatured ethanol loaded out in emissions unit EU1094.9B (RLS Arm #9B) is limited to a maximum of 12,264,000 gallons in any 12-month rolling period.
 - i. The owner or operator shall maintain the following monthly records for EU1094.9B:
 - a. The amount of ethanol and denatured ethanol loaded out (gallons);
 - b. The rolling 12-month total of the amount of ethanol and denatured ethanol loaded out (gallons).
- D. The vapor pressure of any denaturant or additive loaded out in EU1094.9B (RLS Arm #9B) shall not exceed 6.884 psia measured at 60°F. This is based on the vapor pressure of n-pentane (CAS 109-66-0), which is the highest one of the VOC-containing additives currently being used.
 - i. The owner or operator shall maintain a record of the vapor pressure at 60°F of each denaturant or additive that contains VOC loaded out in EU1094.9B (RLS Arm #9B).
- E. The owner or operator shall develop an operating and maintenance plan for the Submerged Fill Pipe (CE1094.9-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Submerged Fill Pipe (CE1094.9-1).

Authority for Requirement: DNR Construction Permit 22-A-024

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 15.6

Stack Opening (inches, dia.): 4

Exhaust Flowrate (cfm): Displacement

Exhaust Temperature (°F): Ambient

Discharge Style: No stack on these emission units – released from railcar opening.

Authority for Requirement: DNR Construction Permit 22-A-023, 22-A-024

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 529.1, 527.1

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	Construction Permit
529.1	1095.4	Alcohol Truck Loadout – Lane 1, Load Arm 2	Alcohol	7,500 gallons per hour	None	20-A-186
527.1	1095.5	Alcohol Truck Loadout – Lane 4, Load Arm 2	Alcohol	7,500 gallons per hour	None	20-A-187

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 39.4 tons/yr ⁽³⁾

Authority for Requirement: DNR Construction Permit 20-A-186, 20-A-187

⁽¹⁾ The emission limit is expressed as the average of three (3) runs.

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

⁽³⁾ Combined emission limit for EU1095.4 and EU1095.5 so that Project 20-206 is considered a minor modification for PSD. The limit is based on 0.74 lb VOC/10³ gal transferred as calculated by Equation (1) from AP-42, Chapter 5.2, *Transportation and Marketing of Petroleum Liquids*. 1.45 was used as the Saturation Factor (Splash loading: dedicated normal service). Compliance demonstration with the limit is based on the operating limit from Condition 5.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

EP529.1

- A. The material loaded out in this emission unit (EU1095.4) is limited to ethanol that has not been denatured. Prior to loading out a material other than ethanol that has not been denatured, the owner or operator shall apply for, and obtain, a modified construction permit from the Department.
 - i. The owner or operator shall keep a record of the type of material loaded out in the emission unit (EU1095.4).
- B. Emission unit EU1095.4 (Alcohol Truck Loadout, Lane 1, Arm 2) shall be located in the same truck lane as existing truck loadout EU1095.3 (Alcohol Truck Loadout, Lane 1, Arm 1). By a physical restriction, only one of the two truck loadouts in Lane 1 can operate at

any time.

- C. The total amount of ethanol loaded out in emission unit EU1095.4 (Alcohol Truck Loadout, Lane 1, Arm 2) and emission unit EU1095.5 (Alcohol Truck Loadout, Lane 4, Arm 2) is limited to a maximum of 106.4 million gallons in any 12-month rolling period.
 - i. The owner or operator shall maintain the following monthly records for emission unit (EU1095.4) and emission unit (EU1095.5):
 - a. The total amount of ethanol loaded out into trucks (gallons); and
 - b. The rolling 12-month total of the amount of ethanol loaded out into trucks (gallons).
 - ii. The owner or operator shall maintain these monthly records by no later than the 30th day following the end of the previous month.

EP527.1

- A. The material loaded out in this emission unit (EU1095.5) is limited to ethanol that has not been denatured. Prior to loading out a material other than ethanol that has not been denatured, the owner or operator shall apply for, and obtain, a modified construction permit from the Department.
 - i. The owner or operator shall keep a record of the type of material loaded out in the emission unit (EU1095.5).
- B. Emission unit EU1095.5 (Alcohol Truck Loadout, Lane 4, Arm 2) shall be located in the same truck lane as existing truck loadout EU1095.1 (Alcohol Truck Loadout, Lane 4, Arm 1). By a physical restriction, only one of the two truck loadouts in Lane 4 can operate at any time.
- C. The total amount of ethanol loaded out in emission unit EU1095.4 (Alcohol Truck Loadout, Lane 1, Arm 2) and emission unit EU1095.5 (Alcohol Truck Loadout, Lane 4, Arm 2) is limited to a maximum of 106.4 million gallons in any 12-month rolling period.
 - i. The owner or operator shall maintain the following monthly records for emission unit (EU1095.4) and emission unit (EU1095.5):
 - a. The total amount of ethanol loaded out into trucks (gallons); and
 - b. The rolling 12-month total of the amount of ethanol loaded out into trucks (gallons).
 - ii. The owner or operator shall maintain these monthly records by no later than the 30th day following the end of the previous month.

Authority for Requirement: DNR Construction Permit 20-A-186, 20-A-187

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 17.5

Stack Opening (inches, dia.): 18

Exhaust Flowrate (cfm): Displacement

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 20-A-186, 20-A-187

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 301.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1116.0	Ethanol Barge Loadout	Alcohol	30 Mgal/hr	None

Applicable Requirements

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

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

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit: 39.0 ton/yr; 3.4 lbs/1000 gal transferred

Authority for Requirement: DNR Construction Permit 15-A-498

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The materials loaded out in this emissions unit (EU1116.0) are limited to ethanol and denatured ethanol. Prior to loading out a different material from ethanol or denatured ethanol in this emissions unit (EU1116.0), the owner or operator shall apply for, and obtain, a modified construction permit from the Department.
- B. The total amount of ethanol and denatured ethanol loaded out in this emissions unit (EU1116.0) is limited to a maximum of 22.94 million gallons in any 12-month rolling period.
- C. The gasoline content of denatured ethanol loaded out in the emissions unit (EU1116.0) shall not exceed 5.5% by weight.
- D. The owner or operator shall keep a record of the type of material loaded out in the emissions unit (EU1116.0) (e.g. ethanol or denatured ethanol). These records shall include the gasoline content of the denatured ethanol by weight.
- E. The owner or operator shall maintain the following monthly records for this emissions unit:
 - i. The amount of ethanol and denatured ethanol loaded out into barges (gallons); and
 - ii. The rolling 12-month total of the amount of ethanol and denatured ethanol loaded out into barges (gallons).

Authority for Requirement: DNR Construction Permit 15-A-498

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 10
Stack Opening (inches, dia.): *
Exhaust Temperature (°F): Ambient
Exhaust Flow Rate (scfm): 67 scfm/displacement
Discharge Style: *
Authority for Requirement: DNR Construction Permit 15-A-498

*There is no stack on this emissions unit.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: See Table: Maltrin® Filter Aid and Carbon Bulk Storage Bins

Associated Equipment

Table: Maltrin® Filter Aid and Carbon Bulk Storage Bins

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment	Construction Permit
182.0	3115.0	Maltrin – #1 Filter Aid Storage Bin – Diatomaceous Earth	Bin Vent Filter (CE3115-1)	93-A-032-S2
183.0	3112.0	Maltrin – #2 Filter Aid Storage Bin – Diatomaceous Earth	Bin Vent Filter (CE3112-1)	93-A-033-S2
184.0	3113.0	Maltrin – #3 Filter Aid Storage Bin – Diatomaceous Earth	Bin Vent Filter (CE3113-1)	93-A-034-S2
185.0	3114.0	Maltrin – #1 Carbon Storage Bin – Activated Carbon	Bin Vent Filter (CE3114-1)	93-A-035-S2

Maximum Rated Capacity: 10 tons/hour (Diatomaceous Earth)

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permits specified in Table: Maltrin® Filter Aid and Carbon Bulk Storage Bins, 567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.038 lb/hr

Authority for Requirement: DNR Construction Permits specified in Table: Maltrin® Filter Aid and Carbon Bulk Storage Bins

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.101 lb/hr

Authority for Requirement: DNR Construction Permits specified in Table: Maltrin®
Filter Aid and Carbon Bulk Storage Bins

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.101 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits specified in Table: Maltrin®
Filter Aid and Carbon Bulk Storage Bins

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The maximum transfer rate of material loaded into the Maltrin #1 Filter Aid Storage Bin (EU3115.0), Maltrin #2 Filter Aid Storage Bin (EU3112.0), Maltrin #3 Filter Aid Storage Bin (EU3113.0), and Maltrin #1 Carbon Storage Bin (EU3114.0) is 10 tons per hour (20,000 pounds per hour), respectively. The owner or operator shall communicate the maximum transfer rate to any company or person that is responsible for operating the material delivery vehicle.
- B. The owner or operator shall limit the operation of the three Maltrin Bulk Filter Aid Storage Bins (EU3115.0, EU3112.0, and EU3113.0) and the Maltrin Bulk Carbon Storage Bin (EU3114.0) so that only one out of the four bins is filled at a time.
- C. For any day that the three Maltrin Bulk Filter Aid Storage Bins (EU3115.0, EU3112.0, and EU3113.0) and the Maltrin Bulk Carbon Storage Bin (EU3114.0) is filled, the owner or operator shall maintain the following records:
 - i. The date the bin(s) was filled; and
 - ii. The time(s) of day that the filling of the bin(s) began and ended.
- D. The owner or operator shall check for visible emissions from the Bin Vent Filters (CE3115-1, CE3112-1, CE3113-1, CE3114-1) once per day at a time when the emission units (EU3115.0, EU3112.0, EU3113.0, EU3114.0) are in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter(s), the owner or operator shall investigate the emission unit(s), control equipment or operations associated with the emission unit(s) and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Bin Vent Filters are not in operation.
- E. The owner or operator shall develop an operating and maintenance plan for the Bin Vent Filters including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

- F. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bin Vent Filters.

Authority for Requirement: DNR Construction Permits specified in Table: Maltrin®
Filter Aid and Carbon Bulk Storage Bins

Emission Point Characteristics

Each emission point specified in Table: Maltrin® Filter Aid and Carbon Bulk Storage Bins shall conform to the specifications listed below.

Stack Height (feet): 90

Stack Diameter (inches): 22 x 14

Stack Exhaust Flow Rate (scfm): 1,178

Stack Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits specified in Table: Maltrin®
Filter Aid and Carbon Bulk Storage Bins

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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 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)

Emission Point ID Number: 66.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
3101.0	Maltrin #1 Spray Dryer	Maltodextrin	1.5 tons/hr	Impingement Scrubber: 3101-1
3101.1	Maltrin #1 Spray Dryer Direct-Fired Burner	Natural Gas	6 MMBtu/hr	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 72-A-199-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.872 lb/hr

Authority for Requirement: DNR Construction Permit 72-A-199-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 2.34 lb/hr

Authority for Requirement: DNR Construction Permit 72-A-199-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.34 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 72-A-199-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.006 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permit 72-A-199-S2
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The total flowrate of the Impingement scrubber's (CE3101-1) liquor shall be maintained at or above 175 gallons per minute.
- B. The differential pressure drop across the Impingement scrubber (CE3101-1) shall be maintained between 0.1 and 6 inches of water column.
- C. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate and the differential pressure drop across the Impingement scrubber (CE3101-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- D. The owner or operator shall develop an operating and maintenance plan for the scrubber, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- E. The owner or operator shall collect and record the total liquor flow rate to the Impingement scrubber (CE3101-1), in gallons per minute, at least once per day. If the liquor flow rate to the Impingement scrubber (CE3101-1) falls below the value specified in Operating Limits condition A. above, the owner or operator shall investigate the Impingement scrubber (CE3101-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Impingement scrubber (CE3101-1) is not in operation.
- F. The owner or operator shall collect and record the pressure drop across the Impingement scrubber (CE3101-1), in inches of water, at least once per day. If the pressure drop across the Impingement scrubber (CE3101-1) falls outside the range specified in Operating Limits condition B. above, the owner or operator shall investigate the Impingement scrubber (CE3101-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Impingement scrubber (CE3101-1) is not in operation.
- G. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the control equipment and the monitoring devices.
- H. The owner or operator shall maintain a record of the completion date that EP66.0 was raised from 124 ft, from the ground to 144 ft, from the ground above ground.

Authority for Requirement: DNR Construction Permit 72-A-199-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height (ft, from the ground): 144
- Stack Diameter (inches, dia.): 36
- Exhaust Flowrate (scfm): 17,650
- Exhaust Temperature (°F): 126
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: DNR Construction Permit 72-A-199-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements

Stack Testing

Pollutant	Compliance Demonstration	Compliance Methodology	Frequency
Opacity	Yes	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾
PM _{2.5}	Yes ⁽²⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾
PM ₁₀	Yes ⁽³⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾
PM – State	Yes	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾

⁽¹⁾Performance testing for PM, PM₁₀, PM_{2.5} and opacity shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM₁₀, and PM_{2.5} emission limits in the Emission Limits section above, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, PM_{2.5} and opacity.

⁽²⁾If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the PM_{2.5} emission limit in the Emission Limits section above by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried maltodextrin product (immediately following the dryer) to determine the PM_{2.5} fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered PM_{2.5}.

⁽³⁾It is acceptable to test for PM and to assume that all PM emissions are PM₁₀ emissions.

Authority for Requirement: DNR Construction Permit 72-A-199-S2

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 538.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
3120.0	Maltrin #1 Spray Dryer System Cooler	Maltodextrin	1.5 tons/hr, dry solids basis	Pulse Jet Baghouse (CE3120-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 03-A-1371-S2
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.10 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-1371-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.15 lb/hr

Authority for Requirement: DNR Construction Permit 03-A-1371-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.15 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 03-A-1371-S2
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The differential pressure drop across the Pulse Jet Baghouse (CE3120-1) shall be maintained between 1 and 8 inches water column.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE3120-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE3120-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE3120-1) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Pulse Jet Baghouse (CE3120-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE3120-1) is not in operation.
- D. The owner or operator shall develop an operational and maintenance plan for the Pulse Jet Baghouse (CE3120-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE3120-1).

Authority for Requirement: DNR Construction Permit 03-A-1371-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 97
Stack Diameter (inches, dia.): 26
Exhaust Flowrate (scfm): 9,535
Exhaust Temperature (°F): 176
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-1371-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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

Monitoring and Recordkeeping satisfy CAM requirements, additional CAM plan not required.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 132.1, 132.2

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	Construction Permit
3111.0	Maltrin #3 Spray Dryer with Product Recovery Cyclones	Starch	3.13 tons/hr, dry solids basis	Venturi Scrubber: 3111-1	80-A-149-S6
3111.1	Maltrin #3 Spray Dryer Direct-Fired Burner	Natural Gas	18 MMBtu/hr	Venturi Scrubber: 3111-2	80-A-150-S6

Applicable Requirements

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

The emissions from each of these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permits 80-A-149-S6, 80-A-150-S6

567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.90 lb/hr

Authority for Requirement: DNR Construction Permits 80-A-149-S6, 80-A-150-S6

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 2.40 lb/hr

Authority for Requirement: DNR Construction Permits 80-A-149-S6, 80-A-150-S6

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 2.40 lb/hr; 0.1 gr/dscf, 0.03 gr/dscf (LAER limit)

Authority for Requirement: DNR Construction Permits 80-A-149-S6, 80-A-150-S6

567 IAC 23.4(7)

567 IAC 31.20(1)"d"

Combined Limit for EP 132.1 and EP 132.2

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.011 lb/hr (RACT limit); 500 ppmv

Authority for Requirement: DNR Construction Permits 80-A-149-S6, 80-A-150-S6

567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. Within 90-days after permit issuance, the owner or operator shall install, calibrate and operate equipment to monitor differential pressure drop across Venturi Scrubber (CE3111-1) and Venturi Scrubber (CE3111-2) as specified in conditions C and E below.
 - i. The owner or operator shall maintain a record of installation date and operation commencement date of equipment to monitor differential pressure drop across Venturi Scrubber (CE3111-1) and Venturi Scrubber (CE3111-2).
- B. The total flowrate of the Venturi Scrubber (CE3111-1) liquor shall be maintained at or above 148 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Venturi Scrubber (CE3111-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to Venturi Scrubber (CE3111-1), in gallons per minute, at least once per day. If the liquor flow rate to Venturi Scrubber (CE3111-1) falls below the value specified in Condition B above, the owner or operator shall investigate Venturi Scrubber (CE3111-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE3111-1) is not in operation.
- C. The differential pressure drop across the Venturi Scrubber (CE3111-1) shall be maintained between 6 and 17 inches of water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across the Impingement Venturi Scrubber (CE3111-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Venturi Scrubber (CE3111-1), in inches of water, at least once per day. If the pressure drop across Venturi Scrubber (CE3111-1) falls outside the range specified in Condition C. above, the owner or operator shall investigate Venturi Scrubber (CE3111-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Venturi Scrubber (CE3111-1) is not in operation.

- D. The total flowrate of the Venturi Scrubber (CE3111-2) liquor shall be maintained at or above 154 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Venturi Scrubber (CE3111-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to Venturi Scrubber (CE3111-2), in gallons per minute, at least once per day. If the liquor flow rate to Venturi Scrubber (CE3111-2) falls below the value specified in Condition D above, the owner or operator shall investigate Venturi Scrubber (CE3111-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Venturi Scrubber (CE3111-2) is not in operation.
- E. The differential pressure drop across the Venturi Scrubber (CE3111-2) shall be maintained between 6 and 17 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across the Impingement Venturi Scrubber (CE3111-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Venturi Scrubber (CE3111-2), in inches of water, at least once per day. If the pressure drop across Venturi Scrubber (CE3111-2) falls outside the range specified in Condition E above, the owner or operator shall investigate Venturi Scrubber (CE3111-2) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Venturi Scrubber (CE3111-2) is not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for Venturi Scrubber (CE3111-1) and Venturi Scrubber (CE3111-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Venturi Scrubber (CE3111-1) and the monitoring devices.
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Venturi Scrubber (CE3111-2) and the monitoring devices.

- G. The owner or operator shall maintain Product Recovery Cyclones in manner to ensure proper operation.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclones.

Authority for Requirement: DNR Construction Permits 80-A-149-S6, 80-A-150-S6

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Emission Point	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
132.1	150	Vertical Unobstructed	42	125	23,000
132.2	150	Vertical Unobstructed	42	125	24,950

Authority for Requirement: DNR Construction Permits 80-A-149-S6, 80-A-150-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements

Stack Testing

Emission Point	Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
132.1, 132.2	PM – State	Performance Testing	Once Every 3 Calendar Years ¹	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
	PM ₁₀ ²	Performance Testing	Once Every 3 Calendar Years ¹	1 hour	40 CFR 51, Appendix M, 201A with 202
	PM _{2.5} ^{2,3}	Performance Testing	Once Every 3 Calendar Years ¹	1 hour	40 CFR 51, Appendix M, 201A with 202

⁽¹⁾Performance testing for PM, PM₁₀, and PM_{2.5} shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM₁₀, and PM_{2.5} emission limits in condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, and PM_{2.5}. Lasts tests completed 6/27/19.

⁽²⁾ It is acceptable to test for PM and to assume that all PM emissions are PM₁₀ emissions.

⁽³⁾ If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the PM_{2.5} limit as specified in condition 1 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried maltodextrin product (immediately following the dryer) to determine the PM_{2.5} fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered PM_{2.5}.

Authority for Requirement: DNR Construction Permits 80-A-149-S6, 80-A-150-S6

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 135.0, 136.0

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment	Construction Permit
135.0	3110.0	Maltrin #4 Spray Dryer with Product Recovery Cyclones	Packed Bed Scrubber (CE3110-1)	85-A-031-S5
136.0	3110.1	Maltrin #4 Spray Dryer Direct Fired Low-NOx Line	Packed Bed Scrubber (CE3110-2)	85-A-032-S5
		Burner	Product Transfer Baghouse (CE3110-3)	

Maximum Rated Capacity: 5.55 tons/hr, dried solids basis (Starch)

Maximum Natural Gas Firing Rate: 28.8 MMBtu/hr

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Emission Limits for EP 135.0 and EP 136.0

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5
567C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "No visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 0.03 gr/dscf (LAER limit)

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5
567 IAC 31.20(1)"d"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 0.04 lb/MMBtu⁽³⁾

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 4.7 ppm_{v,d} ⁽³⁾

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 0.074 lb/MMBtu ⁽³⁾

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5

⁽³⁾Required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Emission Limits for EP 135.0 Only

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.80 lb/hr

Authority for Requirement: DNR Construction Permit 85-A-031-S5

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 2.12 lb/hr

Authority for Requirement: DNR Construction Permit 85-A-031-S5

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.12 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 85-A-031-S5
567 IAC 23.4(7)

Emission Limits for EP 136.0 Only

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 85-A-032-S5

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 3.26 lb/hr

Authority for Requirement: DNR Construction Permit 85-A-032-S5

Pollutant: Particulate Matter (PM)

Emission Limit(s): 3.26 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 85-A-032-S5
567 IAC 23.4(7)

Combined Limit for EP135.0 and EP136.0

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.017 lb/hr (RACT limit)

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The total flowrate for Packed Bed Scrubber (CE3110-1) liquor shall be maintained at or above 500 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Packed Bed Scrubber (CE3110-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to Packed Bed Scrubber (CE3110-1), in gallons per minute, at least once per day. If the liquor flow rate to the Packed Bed Scrubber (CE3110-1) falls below the value specified in Condition 5A, the owner or operator shall investigate the Packed Bed Scrubbers (CE3110-1) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE3110-1) is not in operation.
- B. The total flowrate for Packed Bed Scrubber (CE3110-2) liquor shall be maintained at or above 500 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to the Packed Bed Scrubber (CE3110-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to the Packed Bed Scrubber (CE3110-2), in gallons per minute, at least once per day. If the liquor flow rate to the Packed Bed Scrubber (CE3110-2) falls below the value specified in Condition 5B, the owner or operator shall investigate the Packed Bed Scrubber (CE3110-2) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE3110-2) is not in operation.

- C. The differential pressure drop across each Packed Bed Scrubber (CE3110-1 and CE3110-2) shall be maintained between 0.3 and 5 inches of water column as a 1-hour block average.
- i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across each Packed Bed Scrubber (CE3110-1 and CE3110-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across each Packed Bed Scrubber (CE3110-1 and CE3110-2), in inches of water, on a continuous basis. The owner or operator shall calculate and record the 1-hour block average of the differential pressure drop across each Packed Bed Scrubber in inches water column. If the 1-hour block average pressure drop across either Packed Bed Scrubbers (CE3110-1 and CE3110-2) falls outside the range specified in Condition 5C., the owner or operator shall investigate the Packed Bed Scrubber(s) (CE3110-1 and CE3110-2) and make corrections to the scrubber(s). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Packed Bed Scrubbers (CE3110-1 and CE3110-2) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for each Packed Bed Scrubber (CE3110-1 and CE3110-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3110-1) and the monitoring devices.
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3110-2) and the monitoring devices.
- E. The differential pressure drop across the Baghouse (CE3110-3) shall be maintained between 1 and 6 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across the Baghouse (CE3110-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the pressure drop across the Baghouse (CE3110-3), in inches of water, at least once per day. If the pressure drop across the Baghouse (CE3110-3) falls outside the range specified in Condition E, the owner or operator shall investigate the Baghouse (CE3110-3) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Baghouse (CE3110-3) is not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE3110-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE3110-3).
- G. The owner or operator shall maintain the Product Recovery Cyclones in a manner to ensure proper operation.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclones.
- H. The owner or operator shall tune the Low-NOx Line Burner (EU3110.1) on an annual basis to maintain good combustion. The annual burner tune-up activity shall include at a minimum:
 - i. Inspect the burner-Clean and replace any components, as necessary
 - ii. Inspect the flame pattern and flame dimensions-Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications, if available.
 - iii. Inspect the air-to fuel ratio control system-Ensure the control system is calibrated and functioning properly, if such a system is installed.
 - iv. Optimize emissions of carbon dioxide- Optimize emissions consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which unit may be subject.
 - v. Verify that emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.
- I. The owner or operator shall maintain record on annual basis of the following:
 - i. The completion date of Low-NOx Line Burner (EU3110.1) tuning as specified in condition H,
 - ii. Low-NOx Line Burner (EU3110.1) emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.

- J. The owner or operator shall develop an operating and maintenance plan for the Low-NOx Line Burner (EU3110.1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Low-NOx Line Burner (EU3110.1).

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 144

Stack Diameter (inches, dia.): 42

Exhaust Flowrate (scfm): 26,942 (EP135.0); 25,272 (EP136.0)

Exhaust Temperature (°F): 125

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements

Stack Testing

Emission Point	Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
135.0, 136.0	PM _{2.5} ⁽²⁾⁽³⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
	PM ₁₀ ⁽²⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
	PM – State	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽¹⁾ Performance testing for PM, PM₁₀, and PM_{2.5} shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM₁₀, and PM_{2.5} emission limits in condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, and PM_{2.5}.

⁽²⁾ It is acceptable to test for PM and to assume that all PM emissions are PM₁₀ emissions.

⁽³⁾ If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the PM_{2.5} limit as specified in condition 1 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried maltodextrin product (immediately following the dryer) to determine the PM_{2.5} fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered PM_{2.5}.

Authority for Requirement: DNR Construction Permits 85-A-031-S5, 85-A-032-S5

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 310.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	
3107.0	#5 Maltrin Spray Dryer w/two Parallel Product Recovery Cyclones	Starch	7.5 tons per hour on dry solids basis	East Packed Bed Scrubber (CE3107-1)	Wet Electrostatic Precipitator (CE3107-4)
3107.1	Direct Fired Low-NOx burner	Natural Gas	36.5 MMBtu per hour (maximum); 36,000 SCFH (Natural Gas)	West Packed Bed Scrubber (CE3107-2) Product Transfer Baghouse (CE3107-3)	

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 90-A-309-S3
567C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 1.63 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-309-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 2.20 lb/hr

Authority for Requirement: DNR Construction Permit 90-A-309-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.20 lb/hr; 0.1 gr./dscf

Authority for Requirement: DNR Construction Permit 90-A-309-S3
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.06 lb/hr; 500 ppmv
Authority for Requirement: DNR Construction Permit 90-A-309-S3, 567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 6.9 ppm_{v, d} ⁽²⁾
Authority for Requirement: DNR Construction Permit 90-A-309-S3

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 0.04 lbs/MMBtu⁽²⁾
Authority for Requirement: DNR Construction Permit 90-A-309-S3

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 0.074 lbs/MMBtu⁽²⁾
Authority for Requirement: DNR Construction Permit 90-A-309-S3

⁽²⁾ Required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

No.5 Maltrin Spray Dryer (EU 3107.0)

- A. #5 Maltrin Spray Dryer (EU3107.0) is limited to a maximum maltrin feed rate of 7.5 tons per hour on dry solids basis.
 - i. The owner or operator shall record the maltrin feed rate to #5 Maltrin Spray Dryer (EU3107.0) in tons for each hour of operation. This requirement shall not apply when #5 Maltrin Spray Dryer (EU3107.0) is not in operation.

Control Equipment- Wet ESP

- B. The Wet Electrostatic Precipitator (CE3107-4) secondary voltage shall be maintained at or above 45 kV based on 10 minute average while the equipment is in operation.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the secondary voltage of Wet Electrostatic Precipitator (CE3107-4). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall collect and record the secondary voltage of Wet Electrostatic Precipitator (CE3107-4), in kV on a continuous basis. If the secondary voltage of Wet Electrostatic Precipitator (CE3107-4) falls below the value specified in Condition 5B, the owner or operator shall investigate Wet Electrostatic Precipitator (CE3107-4) and make corrections to Wet Electrostatic Precipitator (CE3107-4). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Wet Electrostatic Precipitator (CE3107-4) is not in operation.
- C. The owner or operator shall develop an operating and maintenance plan for the Wet Electrostatic Precipitator (CE3107-4) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Wet Electrostatic Precipitator (CE3107-4).

Control Equipment- Scrubbers

- D. The total liquor flowrate for East Packed Bed Scrubber (CE3107-1) shall be maintained at or above 680 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Packed Bed Scrubber (CE3107-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to Packed Bed Scrubber (CE3107-1), in gallons per minute, at least once per day. If the liquor flow rate to either Packed Bed Scrubber (CE3107-1) falls below the value specified in Condition 5D, the owner or operator shall investigate Packed Bed Scrubber (CE3107-1) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE3107-1) are not in operation.
- E. The total liquor flowrate for West Packed Bed Scrubber (CE3107-2) shall be maintained at or above 750 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Packed Bed Scrubber (CE3107-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to Packed Bed Scrubber (CE3107-2), in gallons per minute, at least once per day. If the liquor flow rate to Packed Bed Scrubber (CE3107-2) falls below the value specified in Condition 5E, the owner or operator shall investigate Packed Bed Scrubber (CE3107-2) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE3107-2) are not in operation.

- F. The differential pressure drop across each Packed Bed Scrubber (CE3107-1 and CE3107-2) shall be maintained between 1 and 8 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across each Packed Bed Scrubber (CE3107-1 and CE3107-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across each Packed Bed Scrubber (CE3107-1 and CE3107-2), in inches of water, at least once per day. If the pressure drop across either Packed Bed Scrubbers (CE3107-1 and CE3107-2) falls outside the range specified in Condition 5F., the owner or operator shall investigate Packed Bed Scrubbers (CE3107-1 and CE3107-2) and make corrections to the scrubbers. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Packed Bed Scrubbers (CE3107-1 and CE3107-2) are not in operation.
- G. The owner or operator shall develop an operating and maintenance plan for each Packed Bed Scrubber (CE3107-1 and CE3107-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3107-1) and the monitoring devices.
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3107-2) and the monitoring devices.

Control Equipment-Baghouse

- H. The differential pressure drop across Baghouse (CE3107-3) shall be maintained between 0.25 and 6 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE3107-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE3107-3), in inches of water, at least once per day. If the pressure drop across Baghouse (CE3107-3) falls outside the range specified in Condition 5H, the owner or operator shall investigate Baghouse (CE3107-3) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE3107-3) are not in operation.

- I. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE3107-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE3107-3).

Low-NO_x Burner (EU3107.1)

- J. The owner or operator shall tune Low-NO_x burner (EU3107.1) on an annual basis to maintain good combustion. The annual burner tune-up activity shall include at a minimum:
 - i. Inspect the burner-Clean and replace any components, as necessary
 - ii. Inspect the flame pattern and flame dimensions-Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications, if available.
 - iii. Inspect the air-to fuel ratio control system-Ensure the control system is calibrated and functioning properly, if such a system is installed.
 - iv. Optimize emissions of carbon dioxide- Optimize emissions consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which unit may be subject.
 - v. Verify that emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.
- K. The owner or operator shall maintain record on annual basis of the following:
 - i. The completion date of burner (EU3107.1) tuning as specified in condition J,
 - ii. Burner (EU3107.1) emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.
- L. The owner or operator shall develop an operating and maintenance plan for the burner (EU3107.1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of burner (EU3107.1).

Other Requirements

- M. The owner or operator shall maintain Product Recovery Cyclones in manner to ensure proper operation.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclones.

Project Completion

- N. The owner or operator shall install and commence operation of Low-NOx Burner (EU3107.1) by December 31, 2020.
- i. The owner or operator shall maintain a record of installation date and operation commencement date of Low-NOx Burner (EU3107.1).

Authority for Requirement: DNR Construction Permit 90-A-309-S3

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 178

Stack Diameter (inches, dia.): 81

Exhaust Flowrate (scfm): 77,000

Exhaust Temperature (°F): 125

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 90-A-309-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Performance Testing ^{(1),(3)}	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM ₁₀	Performance Testing ^{(1),(2)}	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
PM – State	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽¹⁾Performance testing for PM, PM₁₀, and PM_{2.5}, shall be conducted once every 3 calendar years. After the completion of three consecutive performance tests that demonstrate compliance with PM, PM₁₀, and PM_{2.5} emission limits as specified in condition 1c, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, and PM_{2.5}.

⁽²⁾Performance testing may be conducted for total particulate matter to demonstrate compliance with PM₁₀ limit as specified in permit condition 1.

⁽³⁾If performance testing using methods specified in 40 CFR 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation) then the owner or operator shall demonstrate compliance with PM_{2.5} limit as specified in permit conditions 1 by conducting methods specified in 40 CFR 60, Appendix A, Method 5 and 40 CFR 51 Appendix M Method 202. Utilizing Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried maltrin product (immediately following the maltrin dryer) to determine the PM_{2.5} fraction of the measured total filterable particulate. Utilizing Method 202, the measured condensable fraction shall be considered all PM_{2.5}.

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)

Authority for Requirement: DNR Construction Permit 90-A-309-S3

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 186.0, 187.0

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Control Equipment	Construction Permit
186.0	3116.0	Maltrin #6 Spray Dryer with Product Recovery Cyclones	Packed Bed Scrubber (CE3116-1)	94-A-055-S3
187.0	3116.1	Maltrin #6 Spray Dryer Low-NOx Direct-Fired Burner	Packed Bed Scrubber (CE3116-2)	94-A-061-S3
			Product Transfer Baghouse (CE3116-3)	

Maximum Rated Capacity: 9.84 tons/hr, dry solids basis (Starch)

Maximum Natural Gas Firing Rate: 44 MMBtu/hr

Applicable Requirements

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

The emissions from each of these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.663 lb/hr

Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.76 lb/hr

Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.76 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 0.04 lbs/MMBtu⁽²⁾
Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 9.2 ppm_{v, d}⁽²⁾
Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 0.074 lbs/MMBtu⁽²⁾
Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3

Required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Combined Emission Limit for EP 186.0 and EP 187.0

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.027 lb/hr (RACT limit)
Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3
567 IAC 23.3(3)"e"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The total flowrate for Packed Bed Scrubber (CE3116-1) liquor shall be maintained at or above 1141 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to Packed Bed Scrubber (CE3116-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to each Packed Bed Scrubber (CE3116-1), in gallons per minute, at least once per day. If the liquor flow rate to either Packed Bed Scrubber (CE3116-1) falls below the value specified in Condition 5A, the owner or operator shall investigate Packed Bed Scrubber (CE3116-1) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE3116-1) are not in operation.

- B. The total flowrate for Packed Bed Scrubber (CE3116-2) liquor shall be maintained at or above 1169 gallons per minute.
- i. The owner or operator shall properly operate and maintain equipment to monitor the total liquor flow rate to each Packed Bed Scrubber (CE3116-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total liquor flow rate to Packed Bed Scrubber (CE3116-2), in gallons per minute, at least once per day. If the liquor flow rate to Packed Bed Scrubber (CE3116-2) falls below the value specified in Condition 5B, the owner or operator shall investigate Packed Bed Scrubber (CE3116-2) and make corrections to the scrubber. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Packed Bed Scrubber (CE3116-2) are not in operation.
- C. The differential pressure drop across each Packed Bed Scrubber (CE3116-1 and CE3116-2) shall be maintained between 1 and 8 inches of water column.
- i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across each Packed Bed Scrubber (CE3116-1 and CE3116-2). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across each Packed Bed Scrubber (CE3116-1 and CE3116-2), in inches of water, at least once per day. If the pressure drop across either Packed Bed Scrubbers (CE3116-1 and CE3116-2) falls outside the range specified in Condition 5C., the owner or operator shall investigate Packed Bed Scrubbers (CE3116-1 and CE3116-2) and make corrections to the scrubbers. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Packed Bed Scrubbers (CE3116-1 and CE3116-2) are not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for each Packed Bed Scrubber (CE3116-1 and CE3116-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3116-1) and the monitoring devices.
 - ii. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of Packed Bed Scrubber (CE3116-2) and the monitoring devices.

Control Equipment-Baghouse

- E. The differential pressure drop across Baghouse (CE3116-3) shall be maintained between 0.25 and 6 inches of water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE3116-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE3116-3), in inches of water, at least once per day. If the pressure drop across Baghouse (CE3116-3) falls outside the range specified in Condition 5E. the owner or operator shall investigate Baghouse (CE3116-3) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE3116-3) are not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE3116-3), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE3116-3).

Low-NO_x Burner (EU3116.1)

- G. The owner or operator shall tune Low-NO_x Burner (EU3116.1) on an annual basis to maintain good combustion. The annual burner tune-up activity shall include at a minimum:
 - i. Inspect the burner-Clean and replace any components, as necessary
 - ii. Inspect the flame pattern and flame dimensions-Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications, if available.
 - iii. Inspect the air-to fuel ratio control system-Ensure the control system is calibrated and functioning properly, if such a system is installed.
 - iv. Optimize emissions of carbon monoxide - Optimize emissions consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which unit may be subject.
 - v. Verify that emissions (carbon monoxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.

- H. The owner or operator shall maintain record on annual basis of the following:
 - i. The completion date of burner (EU3116.1) tuning as specified in condition 5G,
 - ii. Burner (EU3116.1) emissions (carbon monoxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufactures specifications.

- I. The owner or operator shall develop an operating and maintenance plan for the Low-NOx Burner (EU3116.1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of burner (EU3116.1).

Other Requirements

- J. The owner or operator shall maintain Product Recovery Cyclones in manner to ensure proper operation.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Product Recovery Cyclones.

Project Completion

- K. The owner or operator shall install and commence operation of Low-NOx Burner (EU3116.1) by December 31, 2022.
 - i. The owner or operator shall maintain a record of installation date and operation commencement date of Low-NOx Burner (EU3116.1).

Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 137

Stack Diameter (inches, dia.): 72

Exhaust Flowrate (scfm): 49,267

Exhaust Temperature (°F): 117

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements

Stack Testing

Emission Point	Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
186.0, 187.0	PM _{2.5} ⁽²⁾⁽³⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
	PM ₁₀ ⁽²⁾	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 51, Appendix M, 201A with 202
	PM – State	Performance Testing	Once Every 3 Calendar Years ⁽¹⁾	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202

⁽¹⁾Performance testing for PM, PM₁₀, and PM_{2.5} shall be conducted once every 3 calendar years. After completion of three consecutive performance tests that demonstrate compliance with the PM, PM₁₀, and PM_{2.5} emission limits in condition 1, the owner or operator may request to modify the performance testing frequency for PM, PM₁₀, and PM_{2.5}.

⁽²⁾ It is acceptable to test for PM and to assume that all PM emissions are PM₁₀ emissions.

⁽³⁾ If performance testing using methods specified in 40 CFR Part 51, Appendix M, 201A with 202 are not performed due to high moisture content (stack saturation), the owner or operator shall demonstrate compliance with the PM_{2.5} limit as specified in condition 1 by using methods specified in 40 CFR Part 60, Appendix A, Method 5 and 40 CFR Part 51, Appendix M, Method 202. Using Method 5, the filterable PM_{2.5} fraction shall be determined by conducting internal particle sizing of the dried maltodextrin product (immediately following the dryer) to determine the PM_{2.5} fraction of the measured total filterable particulate. The entire condensable fraction, measured by using Method 202, shall be considered PM_{2.5}.

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)

Authority for Requirement: DNR Construction Permits 94-A-055-S3, 94-A-061-S3

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: MALT14 (Vents Inside Building)

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
3123.1	Maltrin Storage Bin #1	Maltrin	21,000 lbs/hr	Bin Vent Filter #1 (CE3123-1)
3123.2	Maltrin Storage Bin #2			Bin Vent Filter #2 (CE3123-2)
3123.3	Maltrin Storage Bin #3			Bin Vent Filter #3 (CE3123-3)
3123.4	Maltrin Storage Bin #4			Bin Vent Filter #4 (CE3123-4)
3123.0	Maltrin Pneumatic Transport from Spray Dryer #3 and #5			Pulse Jet Baghouse (CE3123-0) (Kice Receiving Bhse.)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 16-A-032
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions from the building that houses these emission units will require the owner or operator to promptly investigate the emission units and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.04 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-032

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.089 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-032

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.089 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-032
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall check for visible emissions from each of the control equipment specified in Table 1 twice per day at a time when the emission units are in operation. The observations shall be done at least 8 hours apart. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from any of the control equipment specified in Table 1, the owner or operator shall investigate the emission units, control equipment or operations associated with the emission units and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the control equipment specified in Table 1 is not in operation.
- B. The owner or operator shall develop an operating and maintenance plan for the control equipment specified in Table 1, including a preventative maintenance schedule that is consistent with the manufacturer’s instructions for routine and long-term maintenance.
- C. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the control equipment specified in Table 1.

Table 1: Control Equipment List
Bin Vent Filter #1 (CE3123-1)
Bin Vent Filter #2 (CE3123-2)
Bin Vent Filter #3 (CE3123-3)
Bin Vent Filter #4 (CE3123-4)
Pulse Jet Baghouse (Kice Receiving Baghouse) (CE3123-0)

Authority for Requirement: DNR Construction Permit 16-A-032

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: MALT58 (Vents Inside Building)

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
3123.5	Maltrin Storage Bin #5	Maltin	31,000 lbs/hr	Bin Vent Filter #5 (CE3123-5)
3123.6	Maltrin Storage Bin #6			Bin Vent Filter #6 (CE3123-6)
3123.7	Maltrin Storage Bin #7			Bin Vent Filter #7 (CE3123-7)
3123.8	Maltrin Storage Bin #8			Bin Vent Filter #8 (CE3123-8)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 16-A-033
567C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions from the building that houses these emission units will require the owner or operator to promptly investigate the emission units and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.005 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-033

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.01 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-033

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.01 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-033
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall develop an operating and maintenance plan for the #5 Binfilter (CE3123-5), #6 Binfilter (CE3123-6), #7 Binfilter (CE3123-7), and #8 Binfilter (CE3123-8), including a preventative maintenance schedule that is consistent with the manufacturer’s instructions for routine and long-term maintenance.
- B. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the #5 Binfilter (CE3123-5), #6 Binfilter (CE3123-6), #7 Binfilter (CE3123-7), and #8 Binfilter (CE3123-8).

Authority for Requirement: DNR Construction Permit 16-A-033

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 175.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
3108.0	Maltrin, Product Side 2 Receiver from Spray Dryers #1, #4 and #6	Maltodextrin	16.89 tons of maltodextrin per hour	Pulse Jet Baghouse (CE3108-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 91-A-069-S3
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.035 lb/hr

Authority for Requirement: DNR Construction Permit 91-A-069-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.09 lb/hr

Authority for Requirement: DNR Construction Permit 91-A-069-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 91-A-069-S3

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The differential pressure drop across the Pulse Jet Baghouse (CE3108-1) shall be maintained between 1 and 8 inches water column.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE3108-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE3108-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE3108-1) falls outside the range specified in Condition 5 A., the owner or operator shall investigate the Pulse Jet Baghouse (CE3108-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE3108-1) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE3108-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routing and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE3108-1).

Authority for Requirement: DNR Construction Permit 91-A-069-S3

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 162
Stack Diameter (inches, dia.): 8
Exhaust Flowrate (scfm): 1454
Exhaust Temperature (°F): 140
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 91-A-069-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 157.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
3107A	Maltrin Supersacker Transfer Receiver	Maltodextrin	20.7 tons of maltrin per hour, dry solids basis	Pulse Jet Baghouse (CE3107A-1)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 89-A-162-S3
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.14 lb/hr

Authority for Requirement: DNR Construction Permit 89-A-162-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.154 lb/hr

Authority for Requirement: DNR Construction Permit 89-A-162-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.154 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 89-A-162-S3
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The differential pressure drop across the Pulse Jet Baghouse (CE3107A-1) shall be maintained between 3 and 12 inches water column.
- B. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE3107A-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- C. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE3107A-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE3107A-1) falls outside the range specified in Condition 5A, the owner or operator shall investigate the Pulse Jet Baghouse (CE3107A-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE3107A-1) is not in operation.
- D. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE3107A-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routing and long-term maintenance.
- E. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE3107A-1).

Authority for Requirement: DNR Construction Permit 89-A-162-S3

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 83
Stack Diameter (inches, dia.): 12
Exhaust Flowrate (scfm): 4,657
Exhaust Temperature (°F): 96
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 91-A-069-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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)

Emissions Point ID Number: 176.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
3125.0	Maltrin Line #1 Packaging Line: 4 baggers	Maltodextrin	31.5 tons per hour	Pulse Jet Baghouse (CE3109-1)
3126.0	Maltrin Line #2 Packaging Line: 8 baggers	Maltodextrin	31.5 tons per hour	
3127.0	Maltrin Super Sacker	Maltodextrin	12 tons per hour	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 91-A-070-S4
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 91-A-070-S4

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.50 lb/hr

Authority for Requirement: DNR Construction Permit 91-A-070-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.50 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 91-A-070-S4

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. Maltrin Line #1 (EU3125.0), Maltrin Line #2 (EU3126.0) and the Maltrin Supersacker (EU3127.0) combined shall not load out (i.e. bag or pack) more than 54,000 pounds of maltrin per hour (27 tons per hour).
 - i. The owner or operator shall record daily the following information:
 - a. The total amount of maltrin loaded out by Maltrin Line #1 (EU3125.0), Maltrin Line #2 (EU3126.0) and the Maltrin Supersacker (EU3127.0) in pounds or tons;
 - b. The number of hours that maltrin was being loaded out by Maltrin Line #1 (EU3125.0) and Maltrin Line #2 (EU3126.0) and the Maltrin Supersacker (EU3127.0).
 - c. The hourly amount of maltrin loaded out in pounds or tons. This shall be determined by dividing the total daily amount of maltrin loaded out by Maltrin Line #1 (EU3125.0), Maltrin Line #2 (EU3126.0) and the Maltrin Supersacker (EU3127.0) by the number of hours that the same equipment was operated.
- B. The differential pressure drop across the Pulse Jet Baghouse (CE3109-1) shall be maintained between 1 and 6 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE3109-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE3109-1), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE3109-1) falls outside the range specified in Condition 5 B., the owner or operator shall investigate the Pulse Jet Baghouse (CE3109-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE3109-1) is not in operation.
- C. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE3109-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routing and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE3109-1).

Authority for Requirement: DNR Construction Permit 91-A-070-S4

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

- Stack Height (ft, from the ground): 99
- Stack Diameter (inches, dia.): 13.5
- Exhaust Flowrate (scfm): 3,738
- Exhaust Temperature (°F): 88
- Discharge Style: Horizontal
- Authority for Requirement: DNR Construction Permit 91-A-070-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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)

Emission Point ID Number: E11

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
6346.0	N Corn Storage Bin – 3700 bushel capacity	Corn	30 tons per hour	Bin Vent Filter (CE6346-1)
6347.0	S Corn Storage Bin – 3700 bushel capacity	Corn		

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 18-A-069
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.0095 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-069

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.0095 lb/hr

Authority for Requirement: DNR Construction Permit 18-A-069

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.0095 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 18-A-069
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE6346-1) once per day at a time when the N Corn Storage Bin (EU6346.0) or the S Corn Storage Bin (EU6347.0) is being filled. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE6346-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that neither one of the storage bins (EU6346.0, EU6347.0) is filled.
- B. The owner or operator shall develop an operating and maintenance plan for the Bin Vent Filter (CE6346-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- C. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bin Vent Filter (CE6346-1).

Authority for Requirement: DNR Construction Permit 18-A-069

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 48

Stack Opening (inches, dia.): 8 x 8

Exhaust Flowrate (cfm): 28

Exhaust Temperature (°F): Ambient

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 18-A-069

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: E9A and E9B

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	Construction Permit
E9A	6337.1	Cat Litter Bin #1	Specialty Grains	30 tons/hr	Bin Vent Filters: 6337-1	17-A-442-S1
E9B	6337.2	Cat Litter Bin #2	Specialty Grains	30 tons/hr	Bin Vent Filters: 6337-2	17-A-443-S1

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit: 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-442-S1, 17-A-443-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit: 0.008 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-442-S1, 17-A-443-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit: 0.021 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-442-S1, 17-A-443-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 0.021 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-442-S1, 17-A-443-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The owner or operator shall check for visible emissions from the Bin Vent Filters (CE6337-1) and (CE6337-2) once per day at a time when Cat Litter Bin #1 (EU6337.1) and Cat Litter Bin #2 (EU6337.2) are being filled. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filters (CE6337-1) and (CE6337-2), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Bin Vent Filters (CE6337-1) and (CE6337-2) are not filled.
- B. The owner or operator shall develop an operating and maintenance plan for the Bin Vent Filters (CE6337-1) and (CE6337-2) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- C. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bin Vent Filters (CE6337-1) and (CE6337-2).

Authority for Requirement: DNR Construction Permit 17-A-442-S1, 17-A-443-S1

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 40

Stack Opening (inches, dia.): 18

Exhaust Flowrate (cfm): 25

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 17-A-442-S1, 17-A-443-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EPE-10, EPE-10A

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment	Construction Permit
EPE-10	6338.0	Cat Litter Pellet Cooler #1	Specialty Grain Pellets	10 tons of pellets/hr	Pulse Jet Baghouse (CE6338-3)	03-A-1415-S6
EPE-10A	6338.1	Cetec Litter Bagger #1	Specialty Grain Pellets	10 tons of pellets/hr ⁽¹⁾	Cartridge Filters (CE6338-4)	19-A-620-S1
	6338.2	Cetec Litter Bagger #2		10 tons of pellets/hr ⁽¹⁾		

⁽¹⁾Overall capacity of the baggers is 10 tons per hour. Only one bagger can operate at a time due to the conveyor system that can supply litter to only one bagger at a time.

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

	Emission Point EPE-10	Emission Point EPE-10A	Authority for Requirement
Opacity	40% ⁽¹⁾	40% ⁽¹⁾	03-A-1415-S6, 19-A-620-S1, 567 IAC 23.3(2)"d"
Particulate Matter (PM _{2.5})	0.034 lb/hr	0.042 lb/hr	03-A-1415-S6, 19-A-620-S1
Particulate Matter (PM ₁₀)	0.12 lb/hr	0.059 lb/hr	03-A-1415-S6, 19-A-620-S1
Particulate Matter (PM)	0.12 lb/hr; 0.1 gr/dscf	0.059 lb/hr; 0.1 gr/dscf	03-A-1415-S6, 19-A-620-S1, 567 IAC 23.4(7)

⁽¹⁾ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The design capacity of the Cat Litter Pellet Cooler #1 (EU6338.0) is based on the maximum rated capacity of Pellet Mill #6 and Pellet Mill #7. Prior to the installation or modification of equipment that would increase the design capacity of the Cat Litter Pellet Cooler #1 (EU6338.0), the owner or operator shall request and receive a modification to the air construction permit for Cat Litter Pellet Cooler #1 (EU6338.0).
- B. The differential pressure drop across the Pulse Jet Baghouse (CE6338-3) shall be maintained between 0.5 and 5.0 inches water column.
- C. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE6338-3). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
- D. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE6338-3), in inches of water, at least once per day. If the pressure drop across the Pulse Jet Baghouse (CE6338-3) falls outside the range specified in Condition 5.B., the owner or operator shall investigate the Pulse Jet Baghouse (CE6338-3) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE6338-3) is not in operation.
- E. The owner or operator shall check for visible emissions from the Cartridge Filters (CE6338-4) once per day at a time when the Cetec Litter Bagger (EU6338.1) is being operated. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Cartridge Filters (CE6338-4), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Cetec Litter Bagger (EU6338.1) is not operated.
- F. The owner or operator shall develop an operating and maintenance plan for the Pulse Jet Baghouse (CE6338-3) and the Cartridge Filters (CE6338-4), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- G. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Pulse Jet Baghouse (CE6338-3) and the Cartridge Filters (CE6338-4).

Authority for Requirement: DNR Construction Permits 03-A-1415-S6, 19-A-620-S1

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

Emission Point	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
EPE-10	60 Feet	Vertical, unobstructed	18 inches	81°F	4555 scfm
EPE-10A	15 Feet	Vents inside building	NA	68°F	5559 scfm

Authority for Requirement: DNR Construction Permits 03-A-1415-S6, 19-A-620-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

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)

Emission Point ID Number: See Table: Cat Litter Production

Associated Equipment

Table: Cat Litter Production

Emission Point Number	Emission Unit Number	Emission Unit Description	Rated Capacity	Control Equipment	Construction Permit
E1	6330.0	Railcar Unloading of litter ingredients, inside building	30 tons/hr load-in rate	None	17-A-035
E12	6340.0	#3 Line Cat Litter Cooler	20 tons cat litter/hr	Pulse Jet Baghouse (CE6340-1)	17-A-036-S1
	6345.0	Cat Litter Bagger	17.1 tons cat litter/hr	Pulse Jet Baghouse (CE6345-1)	
E13	6341.0	Hammermill	15 tons citrus/hr	Pulse Jet Baghouse (CE6341-1)	17-A-037-S2
E14	6342.0	Starch Day Bin	35 tons/hr: starch load-in rate	Bin Vent Filter (CE6342-1)	17-A-038-S1
E15	6343.0	Cat Litter Holding Bin #3	30 tons/hr: litter load-in rate	Bin Vent Filter (CE6343-1)	17-A-039
E16	6344.0	Cat Litter Holding Bin #4	30 tons/hr: litter load-in rate	Bin Vent Filter (CE6344-1)	17-A-040
E20	6330.1	Truck Unloading: Raw Products for Cat Litter Production	30 tons/hr load-in rate	Pulse Jet Baghouse (CE6330.1-1)	17-A-041-S1
E7A	6335.0	SBM Bin #1	30 tons/hr load-in rate	Bin Vent Filter (CE6335-1)	17-A-323
E7B	6335.1	SBM Bin #2	30 tons/hr load-in rate	Bin Vent Filter (CE6335-2)	17-A-324
FLATSTOR	6339.0	Flat Storage Building	20.5 tons/hr handling rate	None	17-A-133

Applicable Requirements

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

The emissions from these emission points shall not exceed the levels specified below.

Emission Point	Pollutant	lb/hr	tons/yr	Other Limits	Authority for Requirement
E1	Opacity	NA	NA	40% ⁽²⁾	17-A-035, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.013	NA	NA	17-A-035
	Particulate Matter (PM ₁₀)	0.075	NA	NA	17-A-035
	Particulate Matter (PM)	0.51	NA	0.1 gr/dscf	17-A-035, 567 IAC 23.4(7)
E12	Opacity	NA	NA	40% ⁽¹⁾	17-A-036-S1, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.34	NA	NA	17-A-036-S1
	Particulate Matter (PM ₁₀)	0.84	NA	NA	17-A-036-S1
	Particulate Matter (PM)	0.84	NA	0.1 gr/dscf	17-A-036-S1, 567 IAC 23.4(7)
E13	Opacity	NA	NA	40% ⁽¹⁾	17-A-037-S2, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.050	NA	NA	17-A-037-S2
	Particulate Matter (PM ₁₀)	0.18	NA	NA	17-A-037-S2
	Particulate Matter (PM)	0.18	NA	0.1 gr/dscf	17-A-037-S2, 567 IAC 23.3(2)"a"
E14	Opacity	NA	NA	40% ⁽¹⁾	17-A-038-S1, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.043	NA	NA	17-A-038-S1
	Particulate Matter (PM ₁₀)	0.07	NA	NA	17-A-038-S1
	Particulate Matter (PM)	0.07	NA	0.1 gr/dscf	17-A-038-S1, 567 IAC 23.4(7)
E15	Opacity	NA	NA	40% ⁽¹⁾	17-A-039, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.015	NA	NA	17-A-039
	Particulate Matter (PM ₁₀)	0.015	NA	NA	17-A-039
	Particulate Matter (PM)	0.015	NA	0.1 gr/dscf	17-A-039, 567 IAC 23.4(7)
E16	Opacity	NA	NA	40% ⁽¹⁾	17-A-040, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.015	NA	NA	17-A-040
	Particulate Matter (PM ₁₀)	0.015	NA	NA	17-A-040
	Particulate Matter (PM)	0.015	NA	0.1 gr/dscf	17-A-040, 567 IAC 23.4(7)

E20	Opacity	NA	NA	40% ⁽¹⁾	17-A-041-S1, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.029	NA	NA	17-A-041-S1
	Particulate Matter (PM ₁₀)	0.17	NA	NA	17-A-041-S1
	Particulate Matter (PM)	0.17	NA	0.1 gr/dscf	17-A-041-S1, 567 IAC 23.4(7)
E7A	Opacity	NA	NA	40% ⁽¹⁾	17-A-323, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.006	NA	NA	17-A-323
	Particulate Matter (PM ₁₀)	0.015	NA	NA	17-A-323
	Particulate Matter (PM)	0.015	NA	0.1 gr/dscf	17-A-323, 567 IAC 23.4(7)
E7B	Opacity	NA	NA	40% ⁽¹⁾	17-A-324, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.004	NA	NA	17-A-324
	Particulate Matter (PM ₁₀)	0.012	NA	NA	17-A-324
	Particulate Matter (PM)	0.012	NA	0.1 gr/dscf	17-A-324, 567 IAC 23.3(2)"a"
FLATSTOR	Opacity	NA	NA	40% ⁽²⁾	17-A-133, 567 IAC 23.3(2)"d"
	Particulate Matter (PM _{2.5})	0.02	NA	NA	17-A-133
	Particulate Matter (PM ₁₀)	0.051	NA	NA	17-A-133
	Particulate Matter (PM)	0.35	NA	NA	17-A-133

¹ An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

² An exceedance of the indicator opacity of no visible emissions from the building that encloses the emission units will require the owner or operator to promptly investigate the emission unit(s) and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The total amount of material loaded into, and stored in, the Flat Storage Building (EU6339.0) shall not exceed 180,000 tons in any twelve (12) month rolling period.
- B. The owner or operator shall maintain the following monthly records for the Flat Storage Building (EU6339.0):
 - i. The total amount of material received into the building (tons); and
 - ii. The rolling 12-month total of the amount of material received into the building (tons).

- C. Railcar Unloading (EU6330.0) shall be done inside a building. The emission unit (EU6330.0) shall be totally enclosed by the building during the times when material is being unloaded from a rail car or otherwise handled in order to minimize or eliminate particulate matter emissions into the ambient air.
- D. The owner or operator shall check for the presence of visible emissions from the building where the Railcar Unloading (EU6330.0) is located once per day at a time when the Railcar Unloading (EU6333.0) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions from the building. If the owner or operator observes visible emissions from the building where the Railcar Unloading (EU6330.0) is located, the owner or operator shall investigate the emission unit, the enclosure, or the operations associated with the emission unit and make corrections to the associated operations, equipment, or enclosure. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Railcar Unloading (EU6333.0) is not in operation.
- E. The Hammermill (EU6341.0) shall be used to process citrus material only. Prior to using the hammermill to process any other material, the owner or operator shall obtain a modification to the construction permit.

Control Equipment Monitoring

- F. The differential pressure drop across the Pulse Jet Baghouse (CE6340-1) [EPE12, cooler baghouse] shall be maintained between 0.1 and 6 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE6340-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE6340-1), in inches of water, continuously. If the pressure drop across the Pulse Jet Baghouse (CE6340-1) falls outside the range specified in Condition F, the owner or operator shall investigate the Pulse Jet Baghouse (CE6340-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE6340-1) is not in operation.
- G. The differential pressure drop across the Pulse Jet Baghouse (CE6345-1) [EPE12, bagger baghouse] shall be maintained between 0.1 and 6 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE6345-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Pulse

Jet Baghouse (CE6345-1), in inches of water, continuously. If the pressure drop across the Pulse Jet Baghouse (CE6345-1) falls outside the range specified in Condition G, the owner or operator shall investigate the Pulse Jet Baghouse (CE6345-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE6345-1) is not in operation.

- H. The differential pressure drop across the Pulse Jet Baghouse (CE6341-1) [EPE13, hammermill baghouse] shall be maintained between 0.1 and 6 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE6341-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE6341-1), in inches of water, continuously. If the pressure drop across the Pulse Jet Baghouse (CE6341-1) falls outside the range specified in Condition H, the owner or operator shall investigate the Pulse Jet Baghouse (CE6341-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE6341-1) is not in operation.
- I. The differential pressure drop across the Pulse Jet Baghouse (CE6330.1-1) [EPE20, truck unloading baghouse] shall be maintained between 0.1 and 6 inches water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the Pulse Jet Baghouse (CE6330.1-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Pulse Jet Baghouse (CE6330.1-1), in inches of water, continuously. If the pressure drop across the Pulse Jet Baghouse (CE6330.1-1) falls outside the range specified in Condition I, the owner or operator shall investigate the Pulse Jet Baghouse (CE6330.1-1) and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Pulse Jet Baghouse (CE6330.1-1) is not in operation.
- J. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE6342-1) once per day at a time when the Starch Day Bin (EU6342.0) is being filled. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE6342-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record

of all corrective actions taken. This requirement shall not apply on the days that the Starch Day Bin (EU6342.0) is not filled.

- K. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE6343-1) once per day at a time when the Cat Litter Holding Bin #3 (EU6343.0) is being filled. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE6343-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Cat Litter Holding Bin #3 (EU6343.0) is not filled.
- L. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE6344-1) once per day at a time when the Cat Litter Holding Bin #4 (EU6344.0) is being filled. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE6344-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Cat Litter Holding Bin #4 (EU6344.0) is not filled.
- M. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE6335-1) once per day at a time when the SBM Bin #1 (EU6335.0) is being filled. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE6335-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the SBM Bin #1 (EU6335.0) is not filled.
- N. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE6335-2) once per day at a time when the SBM Bin #2 (EU6335.1) is being filled. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE6335-2), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the SBM Bin #2 (EU6335.1) is not filled.
- O. The owner or operator shall develop an operating and maintenance plan for each Pulse Jet Baghouse (CE6340-1, CE6345-1, CE6341-1, and CE6330.1-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of each Pulse Jet

Baghouse (CE6340-1, CE6345-1, CE6341-1, and CE6330.1-1).

- P. The owner or operator shall develop an operating and maintenance plan for each Bin Vent Filter (CE6342-1, CE6343-1, CE6344-1, CE6335-1 and CE6335-2), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of each Bin Vent Filter (CE6342-1, CE6343-1, CE6344-1, CE6335-1 and CE6335-2).

Authority for Requirement: DNR Construction Permits listed in Table: Cat Litter Production

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Emission Point	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM	Authority for Requirement
E1 ⁽¹⁾	NA	NA	NA	NA	NA	17-A-035
E12	130.0	Vertical, unobstructed	42 inches	108°F	13,139 scfm	17-A-036-S1
E13	47.0	Vertical, unobstructed	19 inches	Ambient	2,500 scfm	17-A-037-S2
E14	30.0	Vertical, obstructed	12 inches	70°F	3,000 scfm	17-A-038-S1
E15	30.0	Downward	8 inches x 8 inches	Ambient	28 scfm	17-A-039
E16	30.0	Downward	8 inches x 8 inches	Ambient	28 scfm	17-A-040
E20	25.0	Vertical, unobstructed	12 inches	Ambient	2000 scfm	17-A-041-S1
E7A	42.0	Downward	8 inches x 8 inches	Ambient	60 scfm	17-A-323
E7B	42.0	Downward	8 inches x 8 inches	Ambient	42 scfm	17-A-324
FLATSTOR ⁽¹⁾	NA	NA	NA	NA	NA	17-A-133

⁽¹⁾ There is no stack on these emission points. The emission units are located inside buildings.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Stack Testing

Emission Point	Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
E15, E16, E7A, E7B	Opacity	Performance Test ⁽¹⁾	One-time	1 hour	40 CFR 60, Appendix A, Method 9

⁽¹⁾ The total duration of the Method 9 observations shall be a minimum of 1 hour for each of the following emission points: E15, E16, E7A, and E7B. The observation shall be made while the respective bin is being filled.

Authority for Requirement: DNR Construction Permit 17-A-039, 17-A-040, 17-A-323, 17-A-324

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 294.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
1003.0	Distillery Dry Mill Stage Bin 1	Corn	20 ton (storage)	Pulse Jet Baghouse (CE1003-1)
1003.1	Distillery Dry Mill Hammermill 1		416 bushels of corn per hour	
1004.0	Distillery Dry Mill Stage Bin 2		20 tons (storage)	
1004.1	Distillery Dry Mill Hammermill 2		416 bushels of corn per hour	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-110-S1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "No visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.13 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-110-S1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.21 lb/hr

Authority for Requirement: DNR Construction Permit 17-A-110-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.21 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 17-A-110-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The total grind for the facility (plant number 70-01-004) is limited to 62.050 million bushels of corn per twelve (12) month rolling period.
 - i. The owner or operator shall record on quantity of corn processed on a monthly basis in bushels.
 - ii. The owner or operator shall calculate and record 12-month rolling totals in bushels.
- B. The differential pressure drop across Baghouse (CE1003-1) shall be maintained between 0.3 and 6 inches of water column.
 - i. The owner or operator shall properly operate and maintain equipment to monitor differential pressure drop across Baghouse (CE1003-1). The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across Baghouse (CE1003-1), in inches of water, at least once per day. If the pressure drop across Baghouse (CE1003-1) falls outside the range specified in Condition 5B, the owner or operator shall investigate Baghouse (CE1003-1) and make corrections to the baghouse. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that Baghouse (CE1003-1) are not in operation.
- C. The owner or operator shall develop an operating and maintenance plan for the Baghouse (CE1003-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Baghouse (CE1003-1).

Authority for Requirement: DNR Construction Permit 17-A-110-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 88
Stack Opening (inches): 18
Exhaust Flow Rate (scfm): 3,690
Exhaust Temperature (°F): 90
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 17-A-110-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 1.0

Associated Equipment

Table: Power House Boilers

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
5201.0	Power House Boiler #1	Natural Gas	120 MMBtu/hr
5202.0	Power House Boiler #2	Natural Gas	120 MMBtu/hr
5203.0	Power House Boiler #3	Natural Gas	105 MMBtu/hr
5204.0	Power House Boiler #4	Natural Gas	105 MMBtu/hr
5206.0	Power House Boiler #6	Natural Gas	230 MMBtu/hr
5207.0	Power House Boiler #7	Natural Gas	230 MMBtu/hr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 95-A-374-S4
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 6.78 lb/hr

Authority for Requirement: DNR Construction Permit 95-A-374-S4

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 6.78 lb/hr

Authority for Requirement: DNR Construction Permit 95-A-374-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.283 lb/MMBtu; 6.78 lb/hr

Authority for Requirement: DNR Construction Permit 95-A-374-S4
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂) – 24 hr NAAQS
Emission Limit(s): 500 ppmv; 3,915 lb/hr averaged over 24-hr calendar day
Authority for Requirement: DNR Construction Permit 95-A-374-S4
567 IAC 23.3(3)"e"

Pollutant: Sulfur Dioxide (SO₂) – 1 hr NAAQS
Emission Limit(s): 0.55 lb/hr (RACT limit)
Authority for Requirement: DNR Construction Permit 95-A-374-S4

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The owner or operator shall not vent emissions from Boiler No.1, No.2 #3, No.4, No.6, and No.7 through the Bypass Stacks, i.e. "Short Stacks" associated with each boiler.
- B. The owner or operator shall combust natural gas fuel only in Power House Boilers No.1, No.2, No.3, No.4, No.6, and No.7. As required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

Reporting & Record keeping

- A. The owner or operator shall maintain a record of the date that coal combustion permanently ceased in Power House Boilers No.1, No.2, No.3, No.4, No.6, and No.7.

Authority for Requirement: DNR Construction Permit 95-A-374-S4
Law #CVCV020979, Iowa District Court for Muscatine County
(March 27, 2014)

NESHAP

These sources are subject to 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, and Institutional Boilers and Process Heaters. See Appendix A for rule text.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 219
Stack Opening (inches): 180
Exhaust Flow Rate (scfm): 263,400
Exhaust Temperature (°F): 379
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 95-A-374-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: 142.0 and 153.0

Associated Equipment

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
142.0	5210.0	Boiler #10	Natural Gas	162 MMBtu/hr heat input	Low Excess Air: 5210-0
153.0	5211.0	Boiler #11	Natural Gas	162 MMBtu/hr heat input	Low Excess Air: 5211-0

Applicable Requirements

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

The emissions from each of these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of no visible emissions will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.700 lb/hr

Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.28 lb/hr

Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.28 lb/hr, 0.02 lb/MMBtu (LAER limit)

Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1
567 IAC 31.20(1)"d"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv; 0.10 lb/hr (RACT limit)

Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1
567 IAC 23.3(3)"e"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.008 lb/MMBtu
Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 0.05 lb/MMBtu
Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1

BACT Emission Limits

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 0.25 lb/MMBtu, based on 24-hr average
Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The owner or operator shall tune Power House Boilers #10 and #11 burners on an annual basis to maintain good combustion. The annual burner tune-up activity shall include at a minimum:
 - i. Inspect the burner-Clean and replace any components, as necessary
 - ii. Inspect the flame pattern and flame dimensions-Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications, if available.
 - iii. Inspect the air-to fuel ratio control system-Ensure the control system is calibrated and functioning properly, if such a system is installed.
 - iv. Optimize emissions of carbon dioxide- Optimize emissions consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which unit may be subject.
 - v. Verify that emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufacturer's specifications.

Reporting & Record keeping

- A. The owner or operator shall maintain record on annual basis of the following:
- i. The completion date of Power House Boilers #10 and #11 burners tuning as specified in condition A of the Operating Limits section above.
 - ii. Power House Boilers #10 and #11 burners emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufacturer's specifications.
- B. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Power House Boilers #10 and #11 burners.

Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1

NESHAP

This source is subject to 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, and Institutional Boilers and Process Heaters. See Appendix A for rule text.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 110

Stack Opening (inches): 60

Exhaust Flow Rate (scfm): 33,000

Exhaust Temperature (°F): 300

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 85-A-038-P1, 85-A-135-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 177.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
5212.0	Power House Boiler #12	Natural Gas	359.6 MMBtu/hr	Low NOx Burner: 5212.0

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 93-A-110-P1
567C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 1.50 lb/hr

Authority for Requirement: DNR Construction Permit 93-A-110-P1

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 2.68 lb/hr

Authority for Requirement: DNR Construction Permit 93-A-110-P1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.68 lb/hr; 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permit 93-A-110-P1
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.22 lb/hr (RACT limit)

Authority for Requirement: DNR Construction Permit 93-A-110-P1

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 0.20 lb/MMBtu⁽²⁾⁽³⁾
Authority for Requirement: DNR Construction Permit 93-A-110-P1
567C 23.1(2)"ccc"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.005 lb/MMBtu⁽²⁾
Authority for Requirement: DNR Construction Permit 93-A-110-P1

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 0.05 lb/MMBtu⁽²⁾
Authority for Requirement: DNR Construction Permit 93-A-110-P1

⁽²⁾The limit for CO and VOC emissions as required by the consent order, judgment, and decree entered into between the State of Iowa and Grain Processing Corporation [Law #CVCV020979, Iowa District Court for Muscatine County (March 27, 2014)].

BACT Emission Limit

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 294.5 tons/yr
Authority for Requirement: DNR Construction Permit 93-A-110-P1

New Source Performance Standards (NSPS)

This emission unit is subject to New Source Performance Standards (NSPS) 40 CFR Part 60 §60.40b – 40 CFR §60.49b Subpart Db - *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*. This emission unit is also subject to the General Provisions of 40 CFR Part 60 Subpart A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19).

Authority for Requirement: DNR Construction Permit 93-A-110-P1
40 CFR Part 60 Subpart Db
567 IAC 23.1(2)"ccc"

NESHAP

This source is subject to 40 CFR 63 Subpart DDDDD – National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, and Institutional Boilers and Process Heaters. See Appendix A for rule text.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

- A. The owner or operator shall tune Low NOx Burner (CE5212.0) on an annual basis to maintain good combustion. The annual burner tune-up activity shall include at a minimum:
 - i. Inspect the burner-Clean and replace any components, as necessary
 - ii. Inspect the flame pattern and flame dimensions-Adjust the burner as necessary to optimize the flame pattern and dimensions. The adjustment should be consistent with manufacturer's specifications, if available.
 - iii. Inspect the air-to fuel ratio control system-Ensure the control system is calibrated and functioning properly, if such a system is installed.
 - iv. Optimize emissions of carbon dioxide- Optimize emissions consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which unit may be subject.
 - v. Verify that emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufacturer's specifications

Reporting & Record keeping

- A. The owner or operator shall maintain record on annual basis of the following:
 - i. The completion date of Low NOx Burner (CE5212.0) tuning as specified in condition A above.
 - ii. Document that Low NOx Burner (CE5212.0) emissions (carbon dioxide and nitrogen oxide) and oxygen levels in the exhaust have been optimized consistent per manufacturer's specifications.
- B. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Low NOx Burner (CE5212.0).

- C. Per 40 CFR §60.49b(d), The owner or operator shall record and maintain records of the amounts of each fuel combusted in the Boiler 12 (EU 5212.0) system during each day and calculate the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. The annual capacity factor is defined as the ratio between the actual heat input to a steam generating unit during a calendar year, and the potential heat input had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.
- D. The owner or operator shall comply with all reporting, notification, and recordkeeping requirements as specified 40 CFR Part 60 Subpart Db- *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, specifically §60.49b.

Authority for Requirement: DNR Construction Permit 93-A-110-P1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 117

Stack Opening (inches, dia.): 72

Exhaust Flow Rate (scfm): 97,400

Exhaust Temperature (°F): 350

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 93-A-110-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Continuous Emissions Monitoring:

Pollutant – Nitrogen Oxides (NO_x)

Operational Specifications – 40 CFR 60 Appendix B Performance Specification 2

Date of Initial System Calibration and Quality Assurance – July 29, 2015

Ongoing System Calibration/Quality Assurance – 40 CFR 60 Appendix F Procedure 1

Reporting & Record keeping – 40 CFR 60.7(c) and (d)

Authority for Requirement - DNR Construction Permit 93-A-110-P1

- A. The owner or operator shall demonstrate compliance with the nitrogen oxide emission limits (both NSPS and non-NSPS) through the use of a continuous emission monitoring system (CEMS). The owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged from the emission point to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2). Annual RATA certification shall verify CEMS measurement with all NO_x emission limits. The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.
- B. The 1-hour average NO_x emission rates measured by the NO_x CEM required by 40 CFR 60.48b(b) and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emissions rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2).
- C. Per 40 CFR 60.49b(f), when NO_x emissions are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, 40 CFR Part 60 Appendix A Method 7, 40 CFR Part 60 Appendix A Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.
- D. The owner or operator shall demonstrate compliance with the NO_x ton per year emission limit through the use of a continuous gas fuel flow sensor. The owner or operator shall install, calibrate, maintain, and operate a gas fuel flow sensor for calculating the 30-day rolling average emission rates of NO_x discharged from the emission point to the atmosphere.
- E. In accordance with 40 CFR Part 60 Subpart Db, the owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring either the oxygen content or the carbon dioxide content of the flue gas discharged from the emission point to the atmosphere.
- F. All continuous monitoring systems (CMS) required by this permit shall be operated and data recorded during all periods of operation of the Boiler 12 (EU5212.0) except for CMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments.
- G. If requested by the Department, the owner/operator shall coordinate the quarterly cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.
- H. The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

- I. The 1-hour average emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards of this permit. At least 2 data points must be used to calculate each 1-hour average.
- J. For each hour of missing emission data, the owner or operator shall substitute data by:
 - i. If the monitor data availability is equal to or greater than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - a. For the missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentrations monitor for the hour before and the hour after the missing data period.
 - b. For missing data period greater than 24 hours, substitute the greater of:
 1. The 90th percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
 2. The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - ii. If the monitor data availability is greater than or equal to 90.0% but less than 95.0%, the owner or operator shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - a. For the missing data period less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentrations monitor for the hour before and the hour after the missing data period.
 - b. For missing data period greater than 8 hours, substitute the greater of:
 1. The 95th percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or
 2. The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - iii. If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method that is approved by the Department.

Authority for Requirement: DNR Construction Permit 93-A-110-P1

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 189.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
5215.0	Power House Lime Silo	Lime	10 tons/hr	Bin Vent Filter: 5215-1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 02-A-759-S2
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.024 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-759-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.064 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-759-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.064 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 02-A-759-S2
567 IAC 23.3(2)"a"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The maximum transfer rate of material loaded into the PH Lime Silo (EU5215.0) is 22.5 tons per hour (45,000 pounds per hour). The owner or operator shall communicate the maximum transfer rate to any company or person that is responsible for operating the material delivery vehicle.
- B. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE5215-1) once per day at a time when the emission unit (EU5215.0) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE5215-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Bin Vent Filter (CE5215-1) is not in operation.
- C. The owner or operator shall develop an operating and maintenance plan for the Bin Vent Filter (CE5215-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- D. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bin Vent Filter (CE5215-1).

Authority for Requirement: DNR Construction Permit 02-A-759-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 29

Stack Opening (inches, dia.): 7.5 x 12

Exhaust Flowrate (scfm): 750

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 02-A-759-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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)

Emission Point ID Number: 191.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
5220.0	Power House Salt Silo	Bulk Salt	50,000 pounds of salt per hour	Bin Vent Filter: 5220-1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 02-A-787-S2
567 IAC 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.040 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-787-S2

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.107 lb/hr

Authority for Requirement: DNR Construction Permit 02-A-787-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.107 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 02-A-787-S2
567 IAC 23.3(2)"a"

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The maximum transfer rate of material loaded into the PH Salt Silo (EU5220.0) is 25 tons per hour (50,000 pounds per hour). The owner or operator shall communicate the maximum transfer rate to any company or person that is responsible for operating the material delivery vehicle.
- B. The owner or operator shall check for visible emissions from the Bin Vent Filter (CE5220-1) once per day at a time when the emission unit (EU5220.0) is in operation. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions. If the owner or operator observes visible emissions from the Bin Vent Filter (CE5220-1), the owner or operator shall investigate the emission unit, control equipment or operations associated with the emission unit and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Bin Vent Filter (CE5220-1) is not in operation.
- C. The owner or operator shall develop an operating and maintenance plan for the Bin Vent Filter (CE5220-1) including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.
- D. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from the inspection and maintenance of the Bin Vent Filter (CE5220-1).

Authority for Requirement: DNR Construction Permit 02-A-787-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 38

Stack Opening (inches, dia.): 24

Exhaust Flowrate (scfm): 500

Exhaust Temperature (°F): Ambient

Discharge Style: Obstructed Vertical

Authority for Requirement: DNR Construction Permit 02-A-787-S2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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)

Emission Point ID Number: 548.0

Associated Equipment

Table: Anaerobic Digesters

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
6210.0	WWTP Anaerobic Digester #1	Process Wastewater	3.0 million gallons, 39,000 gal/hr, 1,500 scf of biogas/min	Thiopaq Biogas Desulfurization Process (CE6213-1), Biogas Flare (0.1 MMBTU/hr NG assist) (CE6213-2)
6211.0	WWTP Anaerobic Digester #2		3.0 million gallons, 39,000 gal/hr, 1,500 scf of biogas/min	
6212.0	WWTP Anaerobic Digester #3		3.0 million gallons, 39,000 gal/hr, 1,500 scf of biogas/min	
6214.0	WWTP Anaerobic Digester #4		3.3 million gallons, 39,000 gal/hr, 1,500 scf of biogas/min	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 11-A-661-S3
567 IAC 23.3(2)"d"

⁽¹⁾If visible emissions are observed other than start-up, shut-down or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 0.26 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-661-S3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.26 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-661-S3

Pollutant: Particulate Matter

Emission Limit(s): 0.26 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-661-S3
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)
 Emission Limit(s): 1.0 lb/hr; 500 ppmv
 Authority for Requirement: DNR Construction Permit 11-A-661-S3
 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
 Emission Limit(s): 4.5 lb/hr
 Authority for Requirement: DNR Construction Permit 11-A-661-S3

Pollutant: Volatile Organic Compounds (VOC)
 Emission Limit(s): 9.0 lb/hr
 Authority for Requirement: DNR Construction Permit 11-A-661-S3

Pollutant: Carbon Monoxide (CO)
 Emission Limit(s): 22.5 lb/hr
 Authority for Requirement: DNR Construction Permit 11-A-661-S3

Pollutant: Hydrogen Sulfide (H₂S)
 Emission Limit(s): ⁽²⁾
 Authority for Requirement: DNR Construction Permit 11-A-661-S3

⁽²⁾A limit of 50 ppm, 3-hour rolling average, has been established for the outlet of the Thiopaq Biogas Desulfurization Process, CE-6213-1. This limit does not correspond to the outlet of this emission point. Limit was requested by the facility as the basis of the SO₂ emission limits for the all of the equipment that is able to combust the anaerobic digester biogas.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

Emission Unit	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
6210.0, 6211.0, 6212.0, 6214.0	A	General Provisions	NA	23.1(4)	§63.1 – §63.15
	FFFF	Miscellaneous Organic Chemical Manufacturing	NA	23.1(4)"cf"	§63.2430 – §60.2550

Authority for Requirement: DNR Construction Permit 11-A-661-S3

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The anaerobic digesters shall be controlled by the Thiopaq Biogas Desulfurization Process (CE6213-1) and by either the biogas flare (CE6213-2) or by sending the biogas to plant operations which are allowed to combust biogas. The anaerobic digesters shall at no time operate uncontrolled.
- B. The flare (CE6213-2) shall combust a maximum of 788.4 million standard cubic feet (MMscf) of biogas per 12-month rolling period.
 - i. The owner or operator shall record the amount of biogas burned each month in the flare (CE6213-2) in MMscf.
 - ii. The owner or operator shall record the amount of biogas burned in the flare (CE6213-2) on a rolling 12-month total in MMscf.
- C. The exhaust of the Thiopaq Biogas Desulfurization Process (CE6213-1) shall contain hydrogen sulfide in a concentration less than or equal to 50 ppm, per 3-hour rolling average.
 - i. The owner or operator shall properly operate and maintain equipment to continuously monitor the hydrogen sulfide concentration, in ppm_v, in the biogas in the outlet of the Thiopaq Biogas Desulfurization Scrubber (CE6213-1). The monitoring shall be performed prior to combining the biogas with any other material. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall maintain a continuous record of the 3-hour average hydrogen sulfide concentration in the biogas in the outlet of the Thiopaq Biogas Desulfurization Process (CE6213-1), in ppm_v. If the 3-hour average hydrogen sulfide concentration at the outlet of the Thiopaq Biogas Desulfurization Process (CE6213-1) exceeds the value in Condition 5C, the owner or operator shall investigate the scrubber and make corrections to it. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
- D. The Thiopaq Biogas Desulfurization Scrubber (part of CE6213-1) scrubbant flowrate shall be maintained at or above 400 gallons per minute.
 - i. The owner or operator shall properly operate and maintain equipment to continuously monitor the Thiopaq Biogas Desulfurization Scrubber scrubbant flowrate. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.

- ii. The owner or operator shall maintain a continuous record of the Thiopaq Biogas Desulfurization Scrubber flowrate, in gallons per minute. If the scrubbant flowrate of the Thiopaq Biogas Desulfurization Scrubber falls below the value specified in Condition D, the owner or operator shall investigate the scrubber and make corrections to it. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
- E. The pressure drop across the Thiopaq Biogas Desulfurization Scrubber (part of CE6213-1) shall be maintained between 0.1 and 7.0 inches of water.
 - i. The owner or operator shall properly operate and maintain equipment to monitor the Thiopaq Biogas Desulfurization Scrubber's pressure drop. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per written facility specific operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop across the Thiopaq Biogas Desulfurization Scrubber in inches of water, on a daily basis. If the pressure drop across the Thiopaq Biogas Desulfurization Scrubber falls outside the range specified in Condition 5E, the owner or operator shall investigate the scrubber and make corrections to it. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
- F. The owner or operator shall develop an operating and maintenance plan for the biogas flare (CE6213-2) and the Thiopaq Biogas Desulfurization Scrubber (part of CE6213-1), including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance. This operating and maintenance plan for the flare shall at a minimum include monthly testing of the pilot flame and shall be kept on file at the facility.
 - i. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from inspections and maintenance of the control equipment and monitoring devices.
- G. These emission units are subject to all applicable operating limits set forth in NESHAP Subparts A (40 CFR §63.1 through 40 CFR §63.15) and FFFF (40 CFR §63.2430 through 40 CFR §63.2550).
- H. The facility shall comply with all applicable requirements for each wastewater stream and liquid stream in open systems according to the provisions in 40 CFR §63.2485.
- I. The owner or operator shall shut down the emission points and flares associated with EP542.0 (Construction Permit 04-A-548) and EP543.0 (Construction Permit 04-A-549) upon startup of the biogas flare (CE6213-2) associated with emission point EP548.0. The emission points and flares associated with EP542.0 (Construction Permit 04-A-548) and EP543.0 (Construction Permit 04-A-549) shall be permanently shut down (i.e. natural gas/propane assist lines removed, connections to anaerobic digesters removed) within one month of the startup of the biogas flare (CE 6213-2).

- J. The owner or operator shall maintain a record of the startup date of EP548.0 and the date EP542.0 and EP543.0 are permanently shut down.

Authority for Requirement: DNR Construction Permit 11-A-661-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 35

Stack Opening (inches, dia.): 24

Exhaust Flowrate (scfm): 500 to 1,500

Exhaust Temperature (°F): 1,400

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 11-A-661-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 548.1

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
6213.0	Biogas Desulfurization System Aerobic Bioreactor	Biogas	1500 cf/min

Applicable Requirements

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

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

There are no applicable emission limits at this time.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Operating Limits

A. The owner or operator shall develop an operating and maintenance plan for the aerobic bioreactor, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance. This operating and maintenance plan shall be kept on file at the facility.

Reporting & Record keeping

A. The owner operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the aerobic bioreactor.

Authority for Requirement: DNR Construction Permit 11-A-662

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 26
Stack Opening (inches, dia.): 8
Exhaust Flowrate (scfm): 250
Exhaust Temperature (°F): 90
Discharge Style: Downward
Authority for Requirement: DNR Construction Permit 11-A-662

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: 470.0

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
4901.0	Diesel Firewater Pump	Diesel fuel	302 BHP

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

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

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

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

National Emission Standards for Hazardous Air Pollutants

This emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).

According to 40 CFR 63.6590(a)(1)(ii) this compression ignition emergency engine, located at a major source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

Compliance Date

Per 40 CFR 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

Operation and Maintenance Requirements 40 CFR 63.6602, 63.6625, 63.6640 and Tables 2c and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2c to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5).
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2c. (See Footnote 1 of Table 2c for more information.)

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

Operating Limits

- A. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping

- A. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: Plant Roads

Associated Equipment

Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Control Equipment
7001.0	Plant Haul Roads	Fugitive Dust	NA	Paved Road Sweeping (CE Plant Roads)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

Authority for Requirement: DNR Construction Permit 17-A-297
567 IAC 23.3(2)"c"

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 1.22 lb/24-hrs ⁽¹⁾

Authority for Requirement: DNR Construction Permit 17-A-297

⁽¹⁾The PM_{2.5} limit is established address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM_{2.5} published in the Federal Register (76 FR 9706) on February 22, 2011.

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 9.77 lb/24-hrs ⁽²⁾

Authority for Requirement: DNR Construction Permit 17-A-297

⁽²⁾The PM₁₀ limit is established address correspond to the emission rate used in the dispersion modeling required by the consent decree entered into between the State of Iowa and Grain Processing Corporation [Law No. CVCV016788, Iowa District Court in and for Muscatine County (July 17, 2006)].

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for these permits shall be:

- A. The haul road surface total silt loading shall not exceed 0.4 g/m².
 - i. Within 90-days after completion and operation of the south grain receiving project 16-274 (EU6008.0, EU6009.0, EU6010.0, EU6011.0, EU6012.0, EU6013.0 and 6015.0), performance testing on the haul road surface silt loading shall be completed on a quarterly basis. For each performance test, silt loading sampling shall be done for at least 3 different locations, specifically in high traffic areas (grain receiving loop). The three sampled locations shall then be averaged to determine the silt loading average results. Performance testing shall be completed prior to paved road sweeping. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples.
 - ii. The owner or operator shall maintain a log of each silt load sampling event that contains the following: a) The date of silt load sampling event; b) The location of the sample taken; c) The measured silt content in grams; d) Sample area used for silt load sampling in meters; and, e) The operator's initials.
 - iii. The owner or operator shall maintain record of the average silt loading results in g/m² for each quarter.
- B. Fugitive dust emissions generated from truck traffic on the paved haul roads shall, at a minimum, be controlled by sweeping once every calendar day except during periods of low truck traffic levels (less than 25 percent of weekday levels, Saturday and Sunday. At a minimum all sweeping must be completed using an Elgin Pelican Sweeper or functionally equivalent sweeper type (as approved by the Department).
- C. Best Management Practices (BMP) – The owner or operator shall implement "good housekeeping" or best management practices to minimize fugitive emissions from plant haul roads. Such practices include but are not limited to:
 - i. Clean up spills of raw materials and product on the haul road surface as expeditiously as possible and in a manner consistent with good practice for minimizing dust emissions.
 - ii. Clean around truck scale areas and process buildings in a manner consistent with good practice for minimizing fugitive emissions.
 - iii. Post and maintain speed limit (10 mph) signs.
- D. The owner or operator shall record the frequency of cleaning/sweeping performed on the haul roads. If the roads are not cleaned due to low truck traffic levels, a written record must be kept on site of sweeping frequency for each calendar week.
- E. The owner or operator shall develop a written plan to implement, at a minimum, the Best Management Practices as specified in condition C. The written plan and any documentation as required by the plan shall be maintained onsite and available for inspection.

F. The owner or operator shall restrict access to levee by posting signs warning of restricted access on the north and south fence lines that intersect the levee. A third sign will be posted in the area of highest modeled concentrations prohibiting loitering or fishing. In person surveillance of the levy shall be conducted by security staff periodically throughout 24-hour day, including documentation as to surveillance time and location.

Authority for Requirement: DNR Construction Permit 17-A-297

Monitoring Requirements

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

Stack Testing

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM _{2.5}	Silt Sampling ⁽¹⁾	NA	NA	AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading, Appendix C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples
PM ₁₀	Silt Sampling ⁽¹⁾	NA	NA	

⁽¹⁾ After 4 consecutive quarters where the measured silt loading demonstrated compliance with silt loading limit specified in Condition A, the owner or operator may request to reduce or eliminate silt sampling demonstration.

Authority for Requirement: DNR Construction Permit 17-A-297

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, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, 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 Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in *567 IAC 22.105(2)*. *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

1. 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

1. 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

1. 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 emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
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

1. 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:
 - a. 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;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. 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

1. 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

1. The owner or operator of any air emission source or control equipment shall:
 - a. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
 - b. Remedy any cause of excess emissions in an expeditious manner.
 - c. 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.
 - d. 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.

1. 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.
 - a. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
 - i. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
 - ii. Compliance test methods specified in 567 Chapter 25; or
 - iii. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
 - b. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - i. Any monitoring or testing methods provided in these rules; or
 - ii. 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

1. 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

1. The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in *567 IAC 131.2(2). 567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

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

2. Excess Emissions Reporting

- a. **Initial Reporting of Excess Emissions.** An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
 - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and expected duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps being taken to remedy the excess emission.
 - vi. The steps being taken to limit the excess emission in the interim period.
 - b. **Written Reporting of Excess Emissions.** A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
 - i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
 - vi. The steps that were taken to limit the excess emission.
 - vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*
3. **Emergency Defense for Excess Emissions.** For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The facility at the time was being properly operated;
 - c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
 - d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

- 1. 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

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

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

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
 - d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));

- e. The changes comply with all applicable requirements.
 - f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
 3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
 4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
 5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.
 - a. An administrative permit amendment is a permit revision that does any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or

- iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
 - b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
 - c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.
2. Minor Title V Permit Modification.
- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
 - i. Do not violate any applicable requirement;
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).
 - b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
 - ii. The permittee's suggested draft permit;
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
 - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
 - c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and

conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

- a. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.
- b. The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.111-567 IAC 22.113*

G19. Duty to Obtain Construction Permits

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

G20. Asbestos

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

G21. Open Burning

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

G22. Acid Rain (Title IV) Emissions Allowances

1. 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 or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*
3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

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

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
 - a. Such applicable requirements are included and are specifically identified in the permit; or
 - b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
 - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

1. 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

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

G28. Transferability

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

G29. Disclaimer

1. 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

1. The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not

consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-9545

3. 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

1. 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

1. The current address and phone number for reports and notifications to the EPA administrator is:
Iowa Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

2. 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
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-8200

3. 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

1101 Commercial Court, Suite 10
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

Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-0268

Field Office 6

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

Polk County Public Works Dept.

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

Linn County Public Health

Air Quality Branch
1020 6th Street SE
Cedar Rapids, IA 52401
(319) 892-6000

V. Appendix

40 CFR 60 Subpart A

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A>

40 CFR 60 Subpart Db

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Db>

40 CFR 60 Subpart Dc

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Dc>

40 CFR 60 Subpart Kb

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Kb>

40 CFR Subpart 60 DD

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-DD>

40 CFR 60 Subpart VV

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-VV>

40 CFR 60 Subpart VVa

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-VVa>

40 CFR 63 Subpart A

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A>

40 CFR 63 Subpart FFFF

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-FFFF>

40 CFR 63 Subpart ZZZZ

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ>

40 CFR 63 Subpart DDDDD

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-DDDDD>