Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: ADM Corn Processing
Facility Location: 1350 Waconia Avenue, SW
Cedar Rapids, IA 52404
Air Quality Operating Permit Number: 08-TV-004-M001
Expiration Date: July 16, 2013
Permit Renewal Application Deadline: January 16, 2013

EIQ Number: 92-9062
Facility File Number: 57-01-080

Responsible Official
Name: Doug Brakhahn
Title: Plant Manager
Mailing Address: P.O. Box 1445, SW, Cedar Rapids, Iowa 52406
Phone #: 319-398-0600

Permit Contact Person for the Facility
Name: Rich Stephens
Title: Environmental Coordinator
Mailing Address: P.O. Box 1445, SW, Cedar Rapids, Iowa 52406
Phone #: 319-398-0735

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

Douglas A. Campbell, Supervisor of Air Operating Permits Section — 11/15/2011 Date

Table of Contents

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

II. Plant - Wide Conditions **15**

III. Emission Point Specific Conditions **22**

IV. General Conditions **293**

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

V. Appendix A: NSPS Subpart Db

Appendix B: **NSPS Subpart Kb**
Appendix C: **NSPS Subpart Y**
Appendix D: **NSPS Subpart VV**
Appendix E: **NESHAP Subpart M**
Appendix F: **NESHAP Subpart FFFF**
Appendix G: **NESHAP Subpart ZZZZ**
Appendix H: **ADM Consent Decree and Control Technology Plan**
Appendix I: **Agency O&M Plans – Scrubber and Dust Collector**
Appendix J: **NSPS Subpart D**
Appendix K: **NESHAP Subpart Q**

Abbreviations

acfm actual cubic feet per minute
AQD Air Quality Division (Linn County)
APCO Air Pollution Control Officer
BSP BSP Thermal Systems*(emission point 34)*
CDA completely denatured alcohol
CFBC Circulating Fluidized Bed Combustion
CFR Code of Federal Regulation
CE control equipment
CEM continuous emission monitor
D.C. dust collector
^{o}F degrees Fahrenheit
EIQ emissions inventory questionnaire
EP emission point
EU emission unit
gr./dscf grains per dry standard cubic foot
gr./100 cf grains per one hundred cubic feet
IAC Iowa Administrative Code
IDNR Iowa Department of Natural Resources
LCPH Linn County Public Health
LCO Linn County Ordinance
MR mechanical recompression
MVAC motor vehicle air conditioner
NAICS North American Industry Classification System
NSPS New Source Performance Standard
ppmv parts per million by volume
PSD Prevention of Significant Deterioration
lb./hr pounds per hour
lb./MMBtu pounds per million British thermal units
RTO Regenerative Thermal Oxidizer
SCC Source Classification Codes
scfm standard cubic feet per minute
SEP Supplemental Environmental Project
SIC Standard Industrial Classification
SNCR selective non-catalytic reduction
TPY tons per year
USEPA United States Environmental Protection Agency

Pollutants
PM particulate matter
PM_{10} particulate matter ten microns or less in diameter
SO_2 sulfur dioxide
NO_x nitrogen oxides
VOC volatile organic compound
CO carbon monoxide
HAP hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: ADM Corn Processing
Permit Number: 08-TV-004-M001

Facility Description: Corn Wet Milling Plant (SIC 2046)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
ELEVATOR			
SEP-008	EU-8	Grain Receiving – Truck Unloading	1531 / 1342
SEP-023	EU-23	Grain Receiving – Truck Unloading	2788 / 3136
SEP-061	EU-61	#1 Steel Corn Storage Tank	2433 / 3106
SEP-062	EU-62	#2 Steel Corn Storage Tank	2434 / 3107
SEP-063	EU-63	#3 Steel Corn Storage Tank	2435 / 3108
SEP-064	EU-64	#4 Steel Corn Storage Tank	2436 / 3109
SEP-065	EU-65	Cleaner House Dust Collection "A"	2437 / 3110
SEP-066	EU-66	Cleaner House Dust Collection "B"	2438 / 3111
SEP-180	EU-180	Bulk Weigh Scale	4809 / 5084
SEP-181	EU-181	Rail Dump	4808 / 5085
MILL			
SEP-083	EU-083A	Wet Corn Hopper	3425 / 3227
SEP-083	EU-083B	First Grind Tank	3425 / 3227
SEP-083	EU-083C	MR Steepwater Evaporators	3425 / 3227
SEP-201	EU-201A	Heavy Gluten Storage Tank	3380 / 3246
SEP-201	EU-201B	Mill Water Storage	3380 / 3246
SEP-201	EU-201C	Light Steep Water Storage	3380 / 3246
SEP-204	EU-204	Biomass Storage Tank	4830 / 0
SEP-205	EU-205	Heavy Steepwater Tank	4831 / 0
SEP-206	EU-206	Intermediate Steepwater Storage Tank	4832 / 0
SEP-210	EU-210	Millhouse Fugitive Emissions	3946 / 3948
60% GLUTEN MEAL			
SEP-005	EU-18A	Gluten Meal Dryer #2	2417 / 3092
SEP-005	EU-18B	Gluten Meal Dryer #2 – Natural Gas	2417 / 3092
SEP-005	EU-43A	Fiber Feed Dryer #3	2417 / 3092
SEP-005	EU-43B	Fiber Feed Dryer #3 – Natural Gas	2417 / 3092
SEP-005	EU-G54A	Fiber Feed Dryer #4	2417 / 3092
SEP-005	EU-G54B	Fiber Feed Dryer #4 – Natural Gas	2417 / 3092

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
SEP-005	EU-G55A	Fiber Feed Dryer #5	2417 / 3092
SEP-005	EU-G55B	Fiber Feed Dryer #5 – Natural Gas	2417 / 3092
SEP-010	EU-10A	Gluten Meal - Cooler #1	2419 / 3094
SEP-010	EU-10B	Gluten Meal – Cooler #2	2419 / 3094
SEP-011	EU-11A	Gluten Meal Dryer #1	5346 / 5220
SEP-011	EU-11B	Gluten Meal Dryer #1 – Natural Gas	5346 / 5220
SEP-013	EU-13	Gluten Meal Recycle System #3	4817 / 0
SEP-018	EU-18A	Gluten Meal Dryer #2	5347 / 5221
SEP-018	EU-18B	Gluten Meal Dryer #2 – Natural Gas	5347 / 5221
SEP-019	EU-19A	Fiber Feed Dryer #1	5348 / 5222
SEP-019	EU-19B	Fiber Feed Dryer #1 – Natural Gas	5348 / 5222
SEP-025	EU-6	#2 Fluid Bed Germ Dryer Bypass	2424 / 3099
SEP-025	EU-12	Fiber Feed – Wet Feed System Bypass	2424 / 3099
SEP-025	EU-16A	Germ Dryer Vent System #1 Bypass	2424 / 3099
SEP-025	EU-16B	Germ Dryer Vent System #2 Bypass	2424 / 3099
SEP-025	EU-16C	Germ Dryer Vent System #3 Bypass	2424 / 3099
SEP-025	EU-16D	Germ Dryer Vent System #4 Bypass	2424 / 3099
SEP-025	EU-11A	Gluten Meal Dryer #1	2424 / 3099
SEP-025	EU-11B	Gluten Meal Dryer #1 – Natural Gas	2424 / 3099
SEP-025	EU-19A	Fiber Feed Dryer #1	2424 / 3099
SEP-025	EU-19B	Fiber Feed Dryer #1 – Natural Gas	2424 / 3099
SEP-025	EU-30A	Fiber Feed Dryer #2	2424 / 3099
SEP-025	EU-30B	Fiber Feed Dryer #2 – Natural Gas	2424 / 3099
SEP-026	EU-G54A	Fiber Feed Dryer #4	5349 / 5223
SEP-026	EU-G54B	Fiber Feed Dryer #4 – Natural Gas	5349 / 5223
SEP-027	EU-G55A	Fiber Feed Dryer #5	5350 / 5224
SEP-027	EU-G55B	Fiber Feed Dryer #5 – Natural Gas	5350 / 5224
SEP-030	EU-30A	Fiber Feed Dryer #2	5351 / 5225
SEP-030	EU-30B	Fiber Feed Dryer #2 – Natural Gas	5351 / 5225
SEP-043	EU-43A	Fiber Feed Dryer #3	5352 / 5226
SEP-043	EU-43B	Fiber Feed Dryer #3 – Natural Gas	5352 / 5226
SEP-048	EU-48	Gluten Meal Hammermill	2430 / 3103
SEP-049	EU-49	Milling Storage – Gluten Meal	2431 / 3104
SEP-050	EU-50	Gluten Meal Recycle System #2	4825 / 0
SEP-051	EU-51	Gluten Meal Recycle System #1	4826 / 0
SEP-086	EU-86A	Gluten Truck Loading	3219 / 3354
SEP-086	EU-86B	Gluten Rail Loading	3219 / 3354
SEP-226	EU-226	Gluten Filter Vacuum Pumps Vent	4839 / 0
SEP-230	EU-230	16, 17, 18 Gluten Filter Vacuum Pump Vents	4838 / 0
GERM			

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
SEP-006	EU-6	#2 Fluid Bed Germ Dryer	2418 / 3093
SEP-011	EU-11A	Gluten Meal Dryer #1	5346 / 5220
SEP-011	EU-11B	Gluten Meal Dryer #1 – Natural Gas	5346 / 5220
SEP-015	EU-15	# 1 Fluid Bed Germ Dryer	4541 / 4713
SEP-016	EU-12	Fiber Feed – Wet Feed System	4089 / 4085
SEP-016	EU-16A	Germ Dryer Vent System #1	4089 / 4085
SEP-016	EU-16B	Germ Dryer Vent System #2	4089 / 4085
SEP-016	EU-16C	Germ Dryer Vent System #3	4089 / 4085
SEP-016	EU-16D	Germ Dryer Vent System #4	4089 / 4085
SEP-019	EU-19A	Fiber Feed Dryer #1	5348 / 5222
SEP-019	EU-19B	Fiber Feed Dryer #1 – Natural Gas	5348 / 5222
SEP-021	EU-21	Germ - Cooling System	4819 / 0
SEP-025	EU-6	#2 Fluid Bed Germ Dryer Bypass	2424 / 3099
SEP-025	EU-12	Fiber Feed – Wet Feed System Bypass	2424 / 3099
SEP-025	EU-16A	Germ Dryer Vent System #1 Bypass	2424 / 3099
SEP-025	EU-16B	Germ Dryer Vent System #2 Bypass	2424 / 3099
SEP-025	EU-16C	Germ Dryer Vent System #3 Bypass	2424 / 3099
SEP-025	EU-16D	Germ Dryer Vent System #4 Bypass	2424 / 3099
SEP-025	EU-11A	Gluten Meal Dryer #1	2424 / 3099
SEP-025	EU-11B	Gluten Meal Dryer #1 – Natural Gas	2424 / 3099
SEP-025	EU-19A	Fiber Feed Dryer #1	2424 / 3099
SEP-025	EU-19B	Fiber Feed Dryer #1 – Natural Gas	2424 / 3099
SEP-025	EU-30A	Fiber Feed Dryer #2	2424 / 3099
SEP-025	EU-30B	Fiber Feed Dryer #2 – Natural Gas	2424 / 3099
SEP-030	EU-30A	Fiber Feed Dryer #2	5351 / 5225
SEP-030	EU-30B	Fiber Feed Dryer #2 – Natural Gas	5351 / 5225
SEP-040	EU-40	Germ to Storage	4822 / 0
21% FIBER FEED			
SEP-005	EU-18A	Gluten Meal Dryer #2	2417 / 3092
SEP-005	EU-18B	Gluten Meal Dryer #2 – Natural Gas	2417 / 3092
SEP-005	EU-43A	Fiber Feed Dryer #3	2417 / 3092
SEP-005	EU-43B	Fiber Feed Dryer #3 – Natural Gas	2417 / 3092
SEP-005	EU-G54A	Fiber Feed Dryer #4	2417 / 3092
SEP-005	EU-G54B	Fiber Feed Dryer #4 – Natural Gas	2417 / 3092
SEP-005	EU-G55A	Fiber Feed Dryer #5	2417 / 3092
SEP-005	EU-G55B	Fiber Feed Dryer #5 – Natural Gas	2417 / 3092
SEP-011	EU-11A	Gluten Meal Dryer #1	5346 / 5220
SEP-011	EU-11B	Gluten Meal Dryer #1 – Natural Gas	5346 / 5220
SEP-018	EU-18A	Gluten Meal Dryer #2	5347 / 5221
SEP-018	EU-18B	Gluten Meal Dryer #2 – Natural Gas	5347 / 5221
SEP-019	EU-19A	Fiber Feed Dryer #1	5348 / 5222

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
SEP-019	EU-19B	Fiber Feed Dryer #1 – Natural Gas	5348 / 5222
SEP-025	EU-6	#2 Fluid Bed Germ Dryer Bypass	2424 / 3099
SEP-025	EU-12	Fiber Feed – Wet Feed System Bypass	2424 / 3099
SEP-025	EU-16A	Germ Dryer Vent System #1 Bypass	2424 / 3099
SEP-025	EU-16B	Germ Dryer Vent System #2 Bypass	2424 / 3099
SEP-025	EU-16C	Germ Dryer Vent System #3 Bypass	2424 / 3099
SEP-025	EU-16D	Germ Dryer Vent System #4 Bypass	2424 / 3099
SEP-025	EU-11A	Gluten Meal Dryer #1	2424 / 3099
SEP-025	EU-11B	Gluten Meal Dryer #1 – Natural Gas	2424 / 3099
SEP-025	EU-19A	Fiber Feed Dryer #1	2424 / 3099
SEP-025	EU-19B	Fiber Feed Dryer #1 – Natural Gas	2424 / 3099
SEP-025	EU-30A	Fiber Feed Dryer #2	2424 / 3099
SEP-025	EU-30B	Fiber Feed Dryer #2 – Natural Gas	2424 / 3099
SEP-026	EU-G54A	Fiber Feed Dryer #4	5349 / 5223
SEP-026	EU-G54B	Fiber Feed Dryer #4 – Natural Gas	5349 / 5223
SEP-027	EU-G55A	Fiber Feed Dryer #5	5350 / 5224
SEP-027	EU-G55B	Fiber Feed Dryer #5 – Natural Gas	5350 / 5224
SEP-030	EU-30A	Fiber Feed Dryer #2	5351 / 5225
SEP-030	EU-30B	Fiber Feed Dryer #2 – Natural Gas	5351 / 5225
SEP-032	EU-32	Fiber Feed Steadman Mills	2426 / 3100
SEP-035	EU-35	Fiber Feed Coolers	3321 / 3504
SEP-043	EU-43A	Fiber Feed Dryer #3	5352 / 5226
SEP-043	EU-43B	Fiber Feed Dryer #3 – Natural Gas	5352 / 5226
SEP-211	EU-211	Feedhouse SO_2 Scrubbing System	3947 / 3949
PELLET MILL			
SEP-001	EU-1	Pellet Cooler Vent #4 Dust Collector	2080 / 2185
SEP-029	EU-29	Pellet Cooler Vent #1 Dust Collector	4452 / 0
SEP-036	EU-36	Pellet Mill Dust Collection	3566 / 3520
SEP-038	EU-38	Pellet Cooler Vent #2 Dust Collector	4453 / 0
SEP-039	EU-39	Pellet Cooler Vent #3 Dust Collector	4454 / 0
ALCOHOL			
SEP-055	EU-55	Fermenter Vent / CO_2 Scrubber	4675 / 5044
SEP-057	EU-57	Propagator Vent #1	4676 / 0
SEP-058	EU-58	Propagator Vent #2	4677 / 0
SEP-059	EU-59	Propagator Vent #3	4678 / 0
SEP-060	EU-60	Propagator Vent #4	4679 / 0
SEP-069	EU-69	190 Product Scrubbing System	4682 / 0
SEP-070	EU-70	200 Product Scrubbing System	4683 / 5265
SEP-071	EU-71	# 1 Alcohol Storage Tank Vent	4684 / 5295
SEP-072	EU-72	# 2 Alcohol Storage Tank Vent	4685 / 5296

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
SEP-073	EU-73	# 3 Alcohol Storage Tank Vent	4686 / 5297
SEP-074	EU-74	Denaturant Storage Tank Vent	4687 / 5298
SEP-075	EU-75	#2 Hi-Wine Process Tank Vent	4688 / 5299
SEP-076	EU-76	Alcohol Loadout	4689 / 5017
SEP-077	EU-77	Corrosion Inhibitor Tank Vent	4690 / 5300
SEP-080	EU-80	#3 Hi-Wine Process Tank Vent	4691 / 5301
SEP-081	EU-81	Fusel Oil Tank Vent	4692 / 5302
SEP-082	EU-82	#1 190 Proof Storage Tank Vent	4693 / 5303
CARBON DIOXIDE (CO_2)			
SEP-067	EU-67	Ethanol-CO_2 Carbon Column Regeneration Vent	4680 / 5228
SEP-068	EU-68	Ethanol – CO_2 Dryer Column Regeneration Vent	4681 / 5229
STARCH MANUFACTURING			
SEP-002	EU-2A	Starch Drying – Spray Dryer	3446 / 3497
SEP-002	EU-2B	Natural Gas-Fired Process Heater	3446 / 3497
SEP-003	EU-3	Starch Loadout	3557 / 3498
SEP-004	EU-4	Starch Loadout	3558 / 3499
SEP-007	EU-7	Starch Transfer and Loadout	3559 / 3500
MALTODEXTRIN			
SEP-120	EU-120	Maltodextrin Storage Bin #6	4513 / 5076
SEP-122	EU-122A	Maltodextrin Spray Dryer	4520 / 0
SEP-122	EU-122B	Maltodextrin – Drying Natural Gas Combustion	4520 / 0
SEP-123	EU-123	Maltodextrin Storage Bin #5	4514 / 5077
SEP-124	EU-124	Maltodextrin Packaging Receiver	3804 / 3814
SEP-125	EU-125	Maltodextrin Vacuum / Reprocess System	3980 / 4033
SEP-126	EU-126	Maltodextrin Storage Bin #4	4515 / 5078
SEP-127	EU-127	Maltodextrin Storage Bin #3	4516 / 5079
SEP-128	EU-128	Maltodextrin Storage Bin #2	4517 / 5080
SEP-129	EU-129	Maltodextrin Packaging	4497 / 0
SEP-130	EU-130	Maltodextrin Storage Bin #1	4518 / 5081
FRUCTOSE			
SEP-153	EU-153A	Dextrose Evaporation	4103 / 4048
SEP-153	EU-153B	Steepwater Evaporation	4103 / 4048
SYRUP / REFINERY			
SEP-034	EU-34A	Carbon Furnace	4664 / 5082
SEP-034	EU-34B	Carbon Furnace – Natural Gas Combustion	4664 / 5082
SEP-112	EU-112	Refinery Acid Tank Scrubber System	4490 / 4701
SEP-114	EU-114A	Carbon Furnace #2	4665 / 5083

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
SEP-114	EU-114B	Carbon Furnace #2 – Natural Gas Combustion	4665 / 5083
UTILITIES			
SEP-090	EU-90	Boiler Room Emergency Diesel Generator	4705 / 4846
SEP-091	EU-91	Dry Starch Diesel Generator	4706 / 4847
SEP-092	EU-92	#3 Cooling Tower Emergency Generator	4707 / 4848
SEP-093	EU-93	Alcohol / Waste Treatment Emergency Generator	4708 / 4849
SEP-094	EU-94	Fructose Emergency Generator	4709 / 4850
SEP-097	EU-97	Boiler Room 2 Emergency Diesel Generator	4710 / 4851
SEP-516	EU-516	Co-Gen Emergency Generator	4711 / 4852
SEP-540	EU-540	Co-Gen 2 Emergency Diesel Generator	4712 / 4853
COGENERATION PLANT			
SEP-501	EU-501A	Co-Gen Boiler #1 Bituminous Coal	2069 / 2231
SEP-501	EU-501AN	Co-Gen Boiler #1 Natural Gas	2069 / 2231
SEP-501	EU-501B	Co-Gen Boiler #2 Bituminous Coal	2069 / 2231
SEP-501	EU-501BN	Co-Gen Boiler #2 Natural Gas	2069 / 2231
SEP-502	EU-502A	Co-Gen Boiler #3 Bituminous Coal	3221 / 3134
SEP-502	EU-502AN	Co-Gen Boiler #3 Natural Gas	3221 / 3134
SEP-502	EU-502B	Co-Gen Boiler #4 Bituminous Coal	3221 / 3134
SEP-502	EU-502BN	Co-Gen Boiler #4 Natural Gas	3221 / 3134
SEP-503	EU-503	Bunker Dust Collector	2071 / 2003
SEP-504	EU-504	Crusher Building D.C. System	2072 / 2004
SEP-505	EU-505	Limestone Unloading D.C.	2073 / 2034
SEP-506	EU-506	Fly Ash Conveying D.C. System A	2074 / 2005
SEP-507	EU-507	Fly Ash Conveying D.C. System B	2075 / 2007
SEP-508	EU-508	Fly Ash Silo Vent D.C.	2079 / 2008
SEP-509	EU-509	Bed Ash Conveying D.C. System A	2078 / 2009
SEP-510	EU-510	Bed Ash Conveying D.C. System B	2077 / 2010
SEP-511	EU-511	Bed Ash Silo Vent D.C.	2076 / 2006
SEP-512	EU-512	Transferring Limestone into Storage D.C.	2092 / 2130
SEP-513	EU-513	Transferring Limestone into Storage D.C.	2093 / 2129
SEP-514	EU-514	Coal Truck Dump Pit D.C.	2299 / 2287
SEP-520	EU-520	Fly Ash Conveying D.C. System C	3438 / 3223
SEP-521	EU-521	Co-Gen HCl Tanks Vent	4943 / 0
SEP-522	EU-522	Cogen Turbine Lube Oil Tanks 1-5	4092 / 4035
SEP-530	EU-530A	Co-Gen Boiler No. 5 Bituminous Coal	3737 / 4740
SEP-530	EU-	Co-Gen Boiler No. 5 Natural Gas	3737 / 4740

Emission Point Number	Emission Unit Number	Emission Unit Description	LCPH Permit Numbers
	530AN		
SEP-532	EU-532	Fly Ash Conveying System D	3735 / 4739
SEP-533	EU-533	Fly Ash Conveying System F	3734 / 4738
SEP-534	EU-534	Fly Ash Silo Vent	3733 / 4737
SEP-535	EU-535	Bed Ash Conveying System D	3732 / 4736
SEP-536	EU-536	Bed Ash Conveying System E	3731 / 4735
SEP-537	EU-537	Coal Bunker	3730 / 4734
SEP-538	EU-538	Bed Ash Silo Vent	3729 / 4733
SEP-539	EU-539	Cogen Turbine Lube Oil Tank No. 6	4093 / 4293
SEP-541	EU-541	Bed Ash Conveying System C	4561 / 4741
BULK CHEMICALS			
SEP-009	EU-9	Soda Ash Slur O Lyzer	4448 / 4700
SEP-020	EU-20	Hydrochloric Acid Storage Vent	2107 / 2025
SEP-033	EU-33	Bulk Precoat System	3981 / 4034
SEP-046	EU-46	Sulfur Burning System	3950 / 4019
SEP-165	EU-165	Plate Wash Tanks	4283 / 4336
WASTE TREATMENT			
SEP-240	EU-240	Equalization Basin	4843 / 0
SEP-242	EU-242	West Aeration Basin	4845 / 0
SEP-243	EU-243	East Aeration Basin	4846 / 0
SEP-244	EU-244	Biototron #1	4847 / 0
SEP-245	EU-245	Biototron #2	4848 / 0
SEP-246	EU-246	Biototron #3	4849 / 0
SEP-247	EU-247	East Clarifier	4850 / 0
SEP-248	EU-248	Center Clarifier	4851 / 0
SEP-249	EU-249	West Clarifier	4852 / 0
BIOMASS PROCESSING			
SEP-087	EU-87	Biosolids Dryer	4608 / 0
SEP-089	EU-89	Biosolids Dryer	4619 / 0
SEP-098	EU-98	Biosolids Storage Bin #1	4620 / 5013
SEP-099	EU-99	Biosolids Storage Bin #2	4621 / 5014
SEP-100	EU-100	Biosolids Storage Bin #3	4622 / 5015
SEP-101	EU-101	Biomass Truck Loadout	4623 / 5086

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
ELEVATOR	
MILL	
EU-225	Corn Wet Milling – Millhouse Sewage Tank (ATI 3395 / PTO 3259)
60% GLUTEN MEAL	
GERM	
21% FIBER FEED	
PELLET MILL	
ALCOHOL	
EU-88	Alcohol Caustic Tank (ATI 3769 / PTO 3593)
CARBON DIOXIDE (CO_2)	
EU-78	CO2 Letdown Drum Vent (ATI 5473 / PTO 5318)
EU-79	CO2 Revert Gas Vent (ATI 5474 / PTO 5319)
STARCH MANUFACTURING	
MALTODEXTRIN	
EU-121	Maltodextrin – Evaporation (ATI 5138 / PTO 5230)
FRUCTOSE	
EU-42	Dilute HCl Storage Tank (ATI 2110 / PTO 2021)
EU-45	Ammonia Reclaim System (ATI 3567 / PTO 3470)
EU-47	Dilute Ammonia Storage Vent (ATI 1535 / PTO 1261)
EU-52	Reclaimed Acid Tank Vent (ATI 1570 / PTO 1293)
EU-53	Anion Waste Storage (ATI 1563 / PTO 1289)
EU-54	SO_2 Dilution Tank & Magnesium Bisulfite Storage (ATI 4099 / PTO 4068)
EU-151	Fructose Evaporation (ATI 3381 / PTO 3241)
EU-152	Fructose Evaporation (ATI 3382 / PTO 3242)
EU-154	Fructose Neutralization (ATI 3378 / PTO 3244)
EU-155	Fructose Neutralization (ATI 3379 / PTO 3245)
EU-159	Fructose Evaporation (ATI 3224 / PTO 3135)

Insignificant Emission Unit Number	Insignificant Emission Unit Description
SYRUP / REFINERY	
EU-111	Corn Wet Milling – Hotwell Sewer Tank (ATI 3427 / PTO 3237)
EU-115	Corn Wet Milling – Carbon Column Sewer Tank (ATI 3429 / PTO 3238)
EU-116	Corn Wet Milling – Carbon Column Quench Tank (ATI 3430 / PTO 3239)
EU-117	Corn Wet Milling – No. 2 Converter Hotwell (ATI 3431 / PTO 3240)
EU-118	Corn Wet Milling - #3 & #4 Evaporator Jets Hotwell Vent (ATI 3970 / PTO 3900)
UTILITIES	
EU-95	North Corn Plant Diesel Fire Pump
EU-96	South Corn Plant Diesel Fire Pump
EU-517	East Cogen Diesel Fire Pump
EU-518	West Cogen Diesel Fire Pump
EU-519	Boiler Room Sewer Tank Vent (ATI 3439 / PTO 3353)
EU-523	Corn Plant Diesel Fuel Tank (ATI 4590 / PTO 4702)
EU-524	Corn Plant Gasoline Tank (ATI 4591 / PTO 4703)
CO-GENERATION PLANT	
BULK CHEMICALS	
EU-300	CT #1 Sulfuric Acid Tank (ATI 4658 / PTO 4726)
EU-301	CT #2 Sulfuric Acid Tank (ATI 4657 / PTO 4727)
EU-303	Alcohol Sulfuric Acid Tank (ATI 4655 / PTO 4729)
EU-304	CT #4 Sulfuric Acid Tank (ATI 4654 / PTO 4730)
EU-305	Cogen North CT Sulfuric Acid Tank (ATI 4653 / PTO 4731)
EU-306	Cogen South CT Sulfuric Acid Tank (ATI 4652 / PTO 4732)
WASTE TREATMENT	
EU-84	Treated Outfall #1 Building - Outfall Plume (ATI 3681 / PTO 3505)
EU-85	Treated Outfall #2 Building (ATI 3426 / PTO 3228)
BIOMASS PROCESSING	

Insignificant Emission Unit Number	Insignificant Emission Unit Description
IU-001	New Oil Storage Tanks
IU-002	Used Oil Storage Tanks
IU-003	Backup Generator Fuel Tanks
IU-004	Fire Pump Fuel Tanks
IU-005	Parts Cleaners

II. Plant-Wide Conditions

Facility Name: ADM Corn Processing
Permit Number: 08-TV-004-M001

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

Permit Duration

The term of this permit is: less than 5 years
Commencing on: July 17, 2008
Ending on: July 16, 2013

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): 20% opacity
Authority for Requirement: LCO 10.7

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"
LCO 10.12(2)

Particulate Matter:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

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

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

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

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

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

1992 Corn Grind Expansion

Table Plant Wide Conditions-1. 1992 Corn Grind Expansion – Emission Point Listing

Emission Point Number	Emission Unit	Emission Unit Description	LCPH Permit Numbers
SEP-005	EU-18A	Gluten Meal Dryer #2	2417 / 3092
SEP-005	EU-18B	Gluten Meal Dryer #2 – Natural Gas	2417 / 3092
SEP-005	EU-43A	Fiber Feed Dryer #3	2417 / 3092
SEP-005	EU-43B	Fiber Feed Dryer #3 – Natural Gas	2417 / 3092
SEP-005	EU-G54A	Fiber Feed Dryer #4	2417 / 3092
SEP-005	EU-G54B	Fiber Feed Dryer #4 – Natural Gas	2417 / 3092
SEP-005	EU-G55A	Fiber Feed Dryer #5	2417 / 3092
SEP-005	EU-G55B	Fiber Feed Dryer #5 – Natural Gas	2417 / 3092
SEP-006	EU-6	#2 Fluid Bed Germ Dryer	4815 / 0
SEP-010	EU-10A	Gluten Meal - Cooler #1	2419/3094
SEP-010	EU-10B	Gluten Meal – Cooler #2	2419/3094
SEP-015	EU-15	# 1 Fluid Bed Germ Dryer	4541 / 4713
SEP-016	EU-16A	Germ Dryer Vent System #1	4089 / 4085
SEP-016	EU-16B	Germ Dryer Vent System #2	4089 / 4085
SEP-016	EU-16C	Germ Dryer Vent System #3	4089 / 4085
SEP-016	EU-16D	Germ Dryer Vent System #4	4089 / 4085
SEP-021	EU-21	Germ - Cooling System	4819 / 0
SEP-022	EU-22	Corn Receiving/Corn Cleaning	2423 / 3098 – Permit closed. Unit removed
SEP-025	EU-6	#2 Fluid Bed Germ Dryer Bypass	2424 / 3099
SEP-025	EU-12	Fiber Feed – Wet Feed System Bypass	2424 / 3099
SEP-025	EU-16A	Germ Dryer Vent System #1 Bypass	2424 / 3099
SEP-025	EU-16B	Germ Dryer Vent System #2 Bypass	2424 / 3099
SEP-025	EU-16C	Germ Dryer Vent System #3 Bypass	2424 / 3099

SEP-025	EU-16D	Germ Dryer Vent System #4 Bypass	2424 / 3099
SEP-025	EU-11A	Gluten Meal Dryer #1	2424 / 3099
SEP-025	EU-11B	Gluten Meal Dryer #1 – Natural Gas	2424 / 3099
SEP-025	EU-19A	Fiber Feed Dryer #1	2424 / 3099
SEP-025	EU-19B	Fiber Feed Dryer #1 – Natural Gas	2424 / 3099
SEP-025	EU-30A	Fiber Feed Dryer #2	2424 / 3099
SEP-025	EU-30B	Fiber Feed Dryer #2 – Natural Gas	2424 / 3099
SEP-032	EU-32	Fiber Feed Steadman Mills	2426 / 3100
SEP-035	EU-35	Fiber Feed Coolers	3321 / 3504
SEP-036	EU-36	Pellet Mill Dust Collection	3566 / 3520
SEP-040	EU-40	Germ to Storage	4822 / 0
SEP-048	EU-48	Gluten Meal Hammermill	2430 / 3103
SEP-049	EU-49	Milling Storage – Gluten Meal	2431 / 3104
SEP-050	EU-50	Gluten Meal Recycle System #2	4825 / 0
SEP-061	EU-61	#1 Steel Corn Storage Tank	2433 / 3106
SEP-062	EU-62	#2 Steel Corn Storage Tank	2434 / 3107
SEP-063	EU-63	#3 Steel Corn Storage Tank	2435 / 3108
SEP-064	EU-64	#4 Steel Corn Storage Tank	2436 / 3109
SEP-065	EU-65	Cleaner House Dust Collection "A"	2437 / 3110
SEP-066	EU-66	Cleaner House Dust Collection "B"	2438 / 3111

Facility Wide Limits

Emission Limits:
Total corn grind expansion emissions shall not exceed 14.3 tons of PM-10 per year.
Total corn grind expansion emissions shall not exceed 38.0 tons of NOx per year.
Total corn grind expansion emissions shall not exceed 24.4 tons of particulate matter per year.
Opacity, as determined in accordance to 40 CFR 60, Appendix A, Method 9, shall be less than ten percent (10%) for the entire facility (LCPH and IDNR interpret this 10% opacity requirement to apply to the sources associated with the 1992 Corn Grind Expansion Project).

Operating Limits:
Total Emissions from the 1992 Corn Grind Expansion shall not exceed the following:
The process rate for the facility shall be limited to a weekly average of 450,000 bushels of corn per day.
Operation parameters delineated at the time of final compliance inspections and testing shall be documented and become incorporated into conditions of the final permit to operate.
Compliance test documented parameters, such as inlet and outlet temperatures of the gluten feed dryers shall not be exceeded during normal plant operation. Significant and continued exceeding of these established parameters will be grounds for permit to operate revocation.
For the purposes of this order "significant" shall mean any running 8 hour average which exceeds the average documented parameter by 100 degrees Fahrenheit.
Temperatures may be exceeded during times of mechanical failure and only if the following steps are followed:
The Air Pollution Control Officer shall be notified immediately when temperatures are exceeded.
The dryer temperatures may only be exceeded for 24 continuous hours with the approval of the Air Pollution Control Officer.
If temperatures are exceeded more than 24 hours grind must be cut back to a level where dryer temperatures are within tested limits.
All gauges and meters required on the individual condition sheets must be easily accessible for inspection personnel and must be in working order to be in compliance.
Individual conditions for specific emission points shall be followed, and can be found attached to their individual authorization to install applications.
Gauges showing fuel usage must be installed on all dryers implementing natural gas as the prime source of heat.

Recordkeeping and Reporting:
Quarterly reports of process rates shall be submitted to the Air Pollution Control Officer.
Quarterly reports of the fuel usage as well as NOx emissions shall be submitted to the Air Pollution Control Officer. Documentation must be available on sight at all times.

Authority for requirement: Linn County Construction Permits: ATI 2417/ 3092, 2419/ 3094, 4089/4085, 2424/3099, 2426/3100, 3321/3504, 3566/3520, 2430/3103, 2431/3104, 2433/3106, 2434/3107, 2435/3108, 2436/3109, 2437/3110, 2438/3111

Regulatory Authority

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

Authority for Requirement: 567 IAC 22.108

---

40 CFR 63 NESHAP Subpart FFFF, Miscellaneous Organic Chemical Manufacturing
The requirements of the NESHAP in 40 CFR 63, Subpart FFFF apply to the miscellaneous organic chemical manufacturing process units at this source (including but not limited to process vents, storage tanks, transfer stations, pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems used in the ethanol manufacturing process). Specific emission units subject to this requirement will be determined by the compliance date. The requirements include, but are not limited to the following:
The emission limits, work practice standards, and compliance requirements pursuant to 40 CFR 63.2450-63.2490.
The notification, reporting, and recordkeeping requirements pursuant to 40 CFR 63.2515-63.2525.
The proposed compliance date for the existing chemical manufacturing process units at this source are May 10, 2008. The facility must comply with all requirements of this subpart by the compliance date as determined in the final rule.
Authority for Requirement: LCO 10.9(4) “ffff”
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

Compliance Plan

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

Unless otherwise noted in Section III of this permit, ADM Corn Processing is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, ADM Corn Processing shall comply with such requirements in a timely manner.
Authority for Requirement: 567 IAC 22.108(15)

Consent Decree

Archer Daniels Midland Company (ADM) has entered into a Consent Decree with the United States EPA and 14 state and local air programs in order to resolve a number of alleged violations at its 43 facilities located in 16 states. Four of the facilities affected by this Consent Decree are located within the state of Iowa. These affected facilities are located in Cedar Rapids, Clinton, Des Moines, and Keokuk. ADM shall comply with the requirements of the Consent Decree that apply to this facility.

A copy of this Consent Decree may be obtained on the internet at following address:
http://www.epa.gov/compliance/resources/decrees/civil/caa/admcd.pdf

Authority for Requirement: Consent Decree C.D. IL, #03-CV-2066
567 IAC 22.108(1)

III. Emission Point-Specific Conditions

Facility Name: ADM Corn Processing
Permit Number: 08-TV-004-M001

Emission Point ID Number: SEP-008
Process Area: ELEVATOR

Associated Equipment
Associated Emission Unit ID Numbers: EU-8
Emissions Control Equipment ID Number: CE-8
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-8
Emission Unit Description: Grain Receiving – Truck Unloading
Raw Material/Fuel: Corn
Rated Capacity: 45,000 BU/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): 20%
Authority for Requirement: LCO 10.7

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: LCO 10.9(1)"g"
567 IAC 23.4(7)

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

Stack Testing :

Pollutant – Particulate Matter
1st Stack Test to be Completed by - within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-023
Process Area: ELEVATOR

Associated Equipment
Associated Emission Unit ID Numbers: EU-23
Emissions Control Equipment ID Number: CE-23
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-23
Emission Unit Description: Grain Receiving – Truck Unloading
Raw Material/Fuel: Cracked Corn
Rated Capacity: 25,000 lb/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 10%
Authority for Requirement: LCPH ATI 2788 / PTO 3136

Pollutant: PM-10
Emission Limit(s): 0.77 lb/hr
Authority for Requirement: LCPH ATI 2788 / PTO 3136

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

Control Device:
A baghouse shall be used to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 2788 / PTO 3136

Operating Limits:
Airflow to the baghouse shall be limited to 4,340 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new Authorization to Install permit.
Authority for Requirement: LCPH ATI 2788 / PTO 3136

Compliance Monitoring:

The following information shall be monitored:
Daily pressure drop readings and/or visual check of stack discharge
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 2788/ PTO 3136

Recordkeeping Requirements:
A logbook of operation shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than five years, unless noted otherwise.
Daily pressure drop readings and/or visual check of stack discharge
Records of all maintenance and repair completed on the control device
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 2788 / PTO 3136

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

Stack testing is not required at this time.

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-061, SEP-062, SEP-063, SEP-064
Process Area: ELEVATOR

Associated Equipment

Table Elevator-1. Associated Emission Points.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-061	EU-61	#1 Steel Corn Storage Tank	Corn	45,000 BU/hr	CE-61	Bin Vent Filter
SEP-062	EU-62	#2 Steel Corn Storage Tank	Corn	45,000 BU/hr	CE-62	Bin Vent Filter
SEP-063	EU-63	#3 Steel Corn Storage Tank	Corn	45,000 BU/hr	CE-63	Bin Vent Filter
SEP-064	EU-64	#4 Steel Corn Storage Tank	Corn	45,000 BU/hr	CE-64	Bin Vent Filter

Applicable Requirements

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

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

Table Elevator – 2. Emission Limits.

EP	EU	Opacity	PM-10	LCPH Permit No.
SEP-061	EU-61	10%	0.09 lb/hr, 0.39 tpy	ATI 2433 / PTO 3106
SEP-062	EU-62	10%	0.09 lb/hr, 0.39 tpy	ATI 2434 / PTO 3107
SEP-063	EU-63	10%	0.09 lb/hr, 0.39 tpy	ATI 2435 / PTO 3108
SEP-064	EU-64	10%	0.09 lb/hr, 0.39 tpy	ATI 2436 / PTO 3109

Table Elevator-3. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-061	EU-61	Opacity	20%	LCO 10.7
SEP-062 SEP-063 SEP-064	EU-62 EU-63 EU-64	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

Table Elevator-4. 1992 Corn Grind Expansion

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-061	EU-61	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
SEP-062	EU-62	PM	See Plant Wide Conditions	See Plant Wide Conditions
SEP-063	EU-63	PM-10	See Plant Wide Conditions	See Plant Wide Condition
SEP-064	EU-64	NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate emissions. The control equipment shall be maintained on this source in a good operating condition at all times. A manometer (or equivalent instrumentation) shall also be installed and maintained on this source.

Authority for Requirement: LCPH ATI 2433 / PTO 3106
LCPH ATI 2434 / PTO 3107
LCPH ATI 2435 / PTO 3108
LCPH ATI 2436 / PTO 3109

Operating Limits:

Airflow to the baghouse shall be limited to 1025 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.

Authority for Requirement: LCPH ATI 2433 / PTO 3106
LCPH ATI 2434 / PTO 3107
LCPH ATI 2435 / PTO 3108
LCPH ATI 2436 / PTO 3109

Monitoring Requirements

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

Stack testing not required at this time.

Opacity Monitoring:

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

action does not return the observation to no visible emissions, then a Method 9 observation will be required.

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Refer to Appendix I, Agency O & M Plans, for the complete agency operating and maintenance plan.

Emission Point ID Number: SEP-065, SEP-066
Process Area: ELEVATOR

Associated Equipment

Table Elevator – 5. Associated Emission Points.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-065	EU-65	Cleaner House Dust Collection "A"	Corn	18,750 BU/hr	CE-65	Baghouse
SEP-066	EU-66	Cleaner House Dust Collection "B"	Corn	18,750 BU/hr	CE-66	Baghouse

Applicable Requirements

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

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

Table Elevator – 6. Emission Limits.

EP	EU	Opacity	PM-10	ATI / PTO #
SEP-065	EU-65	10%	0.09 lb/hr, 0.39 tpy	2437 / 3110
SEP-066	EU-66	10%	0.09 lb/hr, 0.39 tpy	2438 / 3111

Table Elevator – 7. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-065 SEP-066	EU-65 EU-66	Opacity	20%	LCO 10.7
		PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

Table Elevator – 8. 1992 Corn Grind Expansion Total Emission Limits.

EP	EU	Pollutant	Emission Limit (s)	Authority for Requirement
SEP-065	EU-65	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
SEP-066	EU-66	PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Conditions
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate emissions. The control equipment shall be maintained on this source in a good operating condition at all times. A manometer (or equivalent instrumentation) shall also be installed and maintained on this source.

Authority for Requirement: LCPH ATI 2437 / PTO 3110
LCPH ATI 2438 / PTO 3111

Operating Limits:

Air flow to the baghouse shall be limited to 1025 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.

Authority for Requirement: LCPH ATI 2437 / PTO 3110
LCPH ATI 2438 / PTO 3111

Monitoring Requirements

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

Stack Testing :

Pollutant – Particulate Matter
1st Stack Test to be Completed by - within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

One stack test on emission point SEP-065 or SEP-066 will represent the compliance testing for these units. If the stack test does not show compliance, further evaluation will be required to bring the units into continuous compliance.

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

Opacity Monitoring:

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

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-180, SEP-181
Process Area: ELEVATOR

Table Elevator-8. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-180	EU-180	Bulk Weigh Scale	Corn	40,000 BU/hr	CE-180	Baghouse
SEP-181	EU-181	Rail Dump	Corn	30,000 BU/hr	CE-181	Baghouse

Applicable Requirements

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

Table Elevator – 9. Emission Limits.

EP	EU	Opacity	PM / PM-10	ATI / PTO #
SEP-180	EU-180	20%	0.004 gr/dscf, 1.03 lb/hr[1]	4809 / 5084
SEP-181	EU-181	20%	0.004 gr/dscf, 1.03 lb/hr[1]	4808 / 5085

[1]Project includes emission points SEP-008, SEP-180, SEP-181 and the project is limited to less than 14.4 tpy of PM/PM10.

Table Elevator – 10. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-180	EU-180	Opacity	20%	LCO 10.7
SEP-181	EU-181	PM	0.1 gr/dscf 0.004 gr/dscf	567 IAC 23.4(7) LCO10.9(1)"g" LCPH ATI 4809/PTO 5084 LCPH ATI 4808/5085

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

Control Device:
A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4809 / PTO 5084

LCPH ATI 4808 / PTO 5085

Operating Condition Monitoring and Recordkeeping:
Record pressure drop readings across the baghouse on a daily basis
Record maintenance and repair completed on the baghouse
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Authority for Requirement: LCPH ATI 4809 / PTO 5084
LCPH ATI 4808 / PTO 5085

Quarterly Report Requirements:
The following information shall be submitted to this department by the 15th of each month for the previous quarter (January 15, April 15, July 15, and October 15).
Submit a quarterly report summarizing the weekly average facility grind rate
Authority for Requirement: LCPH ATI 4809 / PTO 5084
LCPH ATI 4808 / PTO 5085

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

Table Elevator-11. Stack Characteristics.

			Stack Characteristics				
EP	**EU**	**LCPH Permit Numbers**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-180	EU-180	4809 / 5084	130	Vertical, unobstructed	43	85	30,000
SEP-181	EU-181	4808 / 5085	130	Vertical, unobstructed	43	85	30,000

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

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-083
Process Area: MILL

Associated Equipment
Associated Emission Unit ID Numbers: EU-083A, EU-083B, EU-083C
Emissions Control Equipment ID Number: CE-83
Emissions Control Equipment Description: 2 Pass Packed Tower Scrubber

---

Emission Unit vented through this Emission Point: EU-083A
Emission Unit Description: Wet Corn Hopper
Raw Material/Fuel: Corn
Rated Capacity: 18,750 BU/hr

Emission Unit vented through this Emission Point: EU-083B
Emission Unit Description: First Grind Tank
Raw Material/Fuel: Corn
Rated Capacity: 18,750 BU/hr

Emission Unit vented through this Emission Point: EU-083C
Emission Unit Description: MR Steepwater Evaporators
Raw Material/Fuel: Stillage
Rated Capacity: 2000 gpm

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCPH ATI 3425 / PTO 3227
LCO 10.7

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

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

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

Control Device:
Two wet scrubbers in series shall be used to control SO_2 emissions. The control equipment shall be maintained on this source in a good operating condition at all times. All appropriate probes and gauges needed to measure the parameters outlined in "Compliance Monitoring" shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 3425 / PTO 3227

Operating Limits:
Airflow to the wet scrubbers shall be limited to 150 scfm. An increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.

The first pass scrubber water flow shall be maintained in the range of 150-225 gallons per minute and a second scrubber water flow shall be maintained in the range of 400-550 gallons per minute.

The pH of the scrubber water shall be maintained in the range of 6.5-7.5.

Compliance Monitoring:
The following information shall be monitored:
Daily water flow to each scrubber
Daily pH for scrubber water
All monitors shall be easily accessible to air pollution personnel.

Recordkeeping Requirements:
The following information shall be recorded and kept on site for a period of no less than five years.
Daily water flow to each scrubber
Daily pH for scrubber water
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 3425 / PTO 3227

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

Stack Height (ft, from ground): 91
Discharge Style: Vertical, unobstructed
Stack Opening (inches, diameter): 18
Exhaust Temperature (°F): 137
Exhaust Flowrate (acfm): 160
Authority for Requirement: LCPH ATI 3425 / PTO 3227

The temperature and flow rates are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate

may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack testing is not required at this time.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-201
Process Area: MILL

Associated Equipment
Associated Emission Unit ID Numbers: EU-201A, EU-201B, EU-201C
Emissions Control Equipment Description: No Equipment

Emission Unit vented through this Emission Point: EU-201A
Emission Unit Description: Heavy Gluten Storage Tank
Raw Material/ Fuel: Corn Gluten
Rated Capacity: 24,000 gal/hr

Emission Unit vented through this Emission Point: EU-201B
Emission Unit Description: Mill Water Storage
Raw Material/ Fuel: Mill Water
Rated Capacity: 24,000 gal/hr

Emission Unit vented through this Emission Point: EU-201C
Emission Unit Description: Light Steep Water Storage
Raw Material/ Fuel: Light Steepwater
Rated Capacity: 96,000 gal/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCPH ATI 3380/ PTO 3246
LCO 10.7

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

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

Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-204, SEP-205, SEP-206
Process Area: MILL

Table Mill-1. Emission Unit Description.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SEP-204	EU-204	Biomass Storage Tank	Biomass	51,000 gal/hr
SEP-205	EU-205	Heavy Steepwater Tank	Heavy Steepwater	19,200 gal/hr
SEP-206	EU-206	Intermediate Steepwater Storage Tank	Steepwater	19,200 gal/hr

Applicable Requirements

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

Table Mill-2. Emission Limits.

EP	SO_2	VOC [1, 2]	LCPH Permit No.
SEP-204	500 ppmv	0.03 lb/hr, 0.15 tpy	ATI 4830 / PTO 0
SEP-205	500 ppmv	0.19 lb/hr, 0.82 tpy	ATI 4831 / PTO 0
SEP-206	500 ppmv	0.19 lb/hr, 0.82 tpy	ATI 4832 / PTO 0

[1] Standard is expressed as the average of 3 runs.
[2] Standard is a 12-month rolling total.

Table Mill-3. General Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-204 SEP-205 SEP-206	SO_2	500 ppmv	567 IAC 23.3(3)"e" LCO 10.12(2)

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

Table Mill-4. Stack Characteristics.

		Stack Characteristics				
EP	LCPH ATI / PTO Numbers	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (acfm)
SEP-204	4830 / 0	96	Vertical, unobstructed	18	154	114
SEP-205	4831 / 0	96	Vertical, unobstructed	18	134	43
SEP-206	4832 / 0	81	Vertical,	16	134	43

			unobstructed			

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

Monitoring Requirements

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

Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-210
Process Area: MILL

Associated Equipment
Associated Emission Unit ID Numbers: EU-210
Emissions Control Equipment ID Number: CE-210
Emissions Control Equipment Description: Scrubber

Emission Unit vented through this Emission Point: EU-210
Emission Unit Description: Millhouse Fugitive Emissions
Raw Material/Fuel: Corn Slurry
Rated Capacity: 18,750 BU/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: Sulfur Dioxide (SO_2)
Emission Limit(s): 6.11 lb/hr
Authority for Requirement: LCPH ATI 3946 / PTO 3948

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

Control Device:
This source shall have a wet scrubber installed, operating, and maintained at all times in a good operating condition. All appropriate probes and gauges needed to measure the parameters outlined in condition "Compliance Monitoring" shall be installed and maintained in a good operating condition.

Operation Limits:
This source shall control fugitive emissions from the mill area. Any modification or alterations to the sources in the mill area (as represented in Attachment A of the PTO permit) that increase SO_2 emissions would be considered a major modification and will necessitate a new authorization to install permit.
Fresh water flow to the wet scrubber shall be maintained at a minimum of 240 gpm.
The process rate, as defined in the Linn County Code of Ordinances, Chapter 10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.

Compliance Monitoring:
The following information shall be monitored to ensure continued compliance:
Daily check of pressure drop readings
Daily check of water flow to the scrubber
Recordkeeping Requirements:

A log of operation shall be maintained for the operation of the above listed units. As a minimum the following information shall be recorded and kept on site for a period of 6 months. These records shall be available at all times for viewing by air pollution control personnel.
Daily check of pressure drop readings and /or visual check of stack discharge
Daily check of water flow to the scrubber
All monitors shall be easily accessible to air pollution personnel.

Authority for Requirement: LCPH ATI 3946 / PTO 3948

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

Stack Testing:

Pollutant – Sulfur Dioxide (SO_2)
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 6C (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-005

Process Area: 60% GLUTEN MEAL

Table Gluten Meal-1. Associated Equipment.

EP	EU	Associated EP	EU Description	Raw Material/ Fuel	Rated Capacity	Process Area	CE ID	CE Description
SEP-005	EU-18A	None	Gluten Meal Dryer #2	Gluten Meal	15.10 ton/hr	60% Gluten Meal	CE-18, CE-5B	Multivane Scrubber, Packed Tower Scrubber
SEP-005	EU-18B	None	Gluten Meal Dryer #2 – Natural Gas	Natural Gas	0.13 MMCF/hr			
SEP-005	EU-43A	None	Fiber Feed Dryer #3	Fiber Feed	20 ton/hr	21% Fiber Feed	CE-43, CE-5B	Multivane Scrubber, Packed Tower Scrubber
SEP-005	EU-43B	None	Fiber Feed Dryer #3 – Natural Gas	Natural Gas	0.08 MMCF/hr			
SEP-005	EU-G54A	None	Fiber Feed Dryer #4	Fiber Feed	45 ton/hr	21% Fiber Feed	CE-5C, CE-5A	Scrubber, Packed Tower Scrubber
SEP-005	EU-G54B	None	Fiber Feed Dryer #4 – Natural Gas	Natural Gas	0.19 MMCF/hr			
SEP-005	EU-G55A	None	Fiber Feed Dryer #5	Fiber Feed	45 ton/hr	21% Fiber Feed	CE-5D, CE-5A	Scrubber, Packed Tower Scrubber
SEP-005	EU-G55B	None	Fiber Feed Dryer #5 – Natural Gas	Natural Gas	0.19 MMCF/hr			

Applicable Requirements

See SEP-005 under the 21% Fiber Feed process area for applicable requirements, page 64 and 65.

Authority for Requirement: LCPH ATI 2417 / PTO 3092

Emission Point ID Number: SEP-010

Process Area: 60% GLUTEN MEAL

Table Gluten Meal-2. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE-ID	CE Description
SEP-010	EU-10A	Gluten Meal – Cooler #1	Gluten Meal	21.1 ton/hr	CE-10	Baghouse
SEP-010	EU-10B	Gluten Meal – Cooler #2	Gluten Meal	21.1 ton/hr	CE-10	Baghouse

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 10%
Authority for Requirement: LCPH ATI 2419 / PTO 3094
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.6 lb/hr, 2.61 tpy[1]
Authority for Requirement: LCPH ATI 2419 / PTO 3094

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

[1]Emission rate requested by ADM as part of the facility's 1992 grind expansion.
[2]It is assumed that PM is equal to PM10.

Table Gluten Meal-3 1992 Corn Grind Expansion Emission Limits

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-010	EU-10A EU- 10B	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 2419 / PTO 3094

Operating Limits:

Airflow to the baghouse shall be limited to 13,977 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.
The process rate, as defined in the Linn County Code of Ordinances, Chapter 10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.
Authority for Requirement: LCPH ATI 2419 / PTO 3094

Compliance Monitoring:

Monitor daily pressure drop readings and/or visual check of stack discharge.
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 2419/ PTO 3094

Recordkeeping Requirements:

A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three years, unless noted otherwise.
Weekly average of facility grind rate
Daily pressure drop readings and/or visual check of stack discharge.
Record all maintenance and repair completed on the control device.
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 2419 / PTO 3094

Reporting:

Submit a quarterly report summarizing the weekly average grind rate by the 15th of each month for the previous quarter (Jan. 15, April 15, July 15, and October 15).
Authority for Requirement: LCPH ATI 2419 / PTO 3094

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

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

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

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

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.
Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-011, SEP-019, SEP-030
Process Area: 60% GLUTEN MEAL

Table Gluten Meal-4. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-011	EU-11A	Gluten Meal Dryer #1	Gluten Meal	7.7 ton/hr	CE-011	Multivane Scrubber
SEP-011	EU-11B	Gluten Meal Dryer #1– Natural Gas	Natural Gas	0.08 MMCF/ hr	CE-011	Multivane Scrubber
SEP-019	EU-19A	Fiber Feed Dryer #1	Fiber Feed	15.75 ton/hr	CE-019	Multivane Scrubber
SEP-019	EU-19B	Fiber Feed Dryer #1– Natural Gas	Natural Gas	0.08 MMCF/ hr	CE-019	Multivane Scrubber
SEP-030	EU-30A	Fiber Feed Dryer #2	Gluten Feed	15.75 ton/hr	CE-030	Multivane Scrubber
SEP-030	EU-30B	Fiber Feed Dryer #2– Natural Gas	Natural Gas	0.08 MMCF/ hr	CE-030	Multivane Scrubber

---

Applicable Requirements

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

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

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

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

Operating Limits:
This source shall only exhaust air from the dryer chambers prior to the dryer igniters being activated.

No combustion gases and no feed shall be added to the dryer while the dryer exhaust is venting through the bypass.
The control equipment on this unit shall be maintained and operated according to the manufacturer's specification and good operating practices.
Authority for Requirement: LCPH ATI 5346 / PTO 5220
LCPH ATI 5348 / PTO 5222
LCPH ATI 5351 / PTO 5225

Record keeping Requirements:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives. The following items shall be recorded:
Record the date and duration of each purge exhausted through the bypass stack.
All maintenance and repair completed on the control device.
Authority for Requirement: LCPH ATI 5346 / PTO 5220
LCPH ATI 5348 / PTO 5222
LCPH ATI 5351 / PTO 5225

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

Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-013, SEP-050, SEP-051

Process Area: 60% GLUTEN MEAL

Table Gluten Meal-5. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-013	EU-13	Gluten Meal Recycle System #3	Gluten Meal	3.5 ton/hr	CE-13	Baghouse
SEP-050	EU-50	Gluten Meal Recycle System #2	Gluten Meal	3.5 ton/hr	CE-50	Baghouse
SEP-051	EU-51	Gluten Meal Recycle System #1	Gluten Meal	10.55 ton/hr	CE-51	Baghouse

Applicable Requirements

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

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

Table Gluten Meal-6. Emission Limits.

EP	EU	Opacity	PM [1]	PM10	VOC	ATI / PTO #
SEP-013	EU-13	20%	0.1 gr/dscf	2.13 lb/hr	0.28 lb/hr, 1.24 tpy	4817 / 5227
SEP-050	EU-50	20%	0.07 lb/hr	0.07 lb/hr[1,2]	0.17 lb/hr,	4825 / 0
SEP-051	EU-51	20%	0.1 lb/hr,	0.1 lb/hr	0.31 lb/hr, 1.31 tpy	4826 / 0

Table Gluten Meal-7. General Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-013	EU-13	Opacity	20%[3]	LCO 10.7
SEP-050 SEP-051	EU-50 EU-51	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

[1]It is assumed that PM is equal to PM10.
[2]Emission rate requested by ADM as part of the facility's 1992 grind expansion.
[3] 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, Linn County may require additional proof to demonstrate compliance (e.g. stack testing).

Operational Limits & Requirements

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

Control Device:

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

Authority for Requirement: LCPH ATI 4817 / PTO 5227
LCPH ATI 4825 / PTO 0
LCPH ATI 4826 / PTO 0

Operating Limits:

The facility-wide grind shall be limited to 450,000 bushels of corn per day based on a 52-week rolling average.

Authority for Requirement: LCPH ATI 4825 / PTO 0
LCPH ATI 4826/ PTO 0

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

The pressure differential measured across the baghouse shall be greater than one-half (0.5) inch of water column and less than six (6) inches of water column.

Authority for Requirement: LCPH ATI 4817 / PTO 5227
LCPH ATI 4825 / PTO 0
LCPH ATI 4826 / PTO 0

Operating Condition Monitoring and Recordkeeping:

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

Monitor and record the pressure differential across the baghouse on a weekly basis.

Monitor and record “no visible emissions” observations on a weekly basis and any action resulting froom the observation.

Record all maintenance and repair completed on the control device.

Authority for Requirement: LCPH ATI 4817 / PTO 5227
LCPH ATI 4825 / PTO 0
LCPH ATI 4826 / PTO 0

Record the weekly average facility grind rate.

Authority for Requirement: LCPH ATI 4825 / PTO 0
LCPH ATI 4826/ PTO 0

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

Table Gluten Meal-8. Emission Point Characteristics.

		Stack Characteristics				
EP	**LCPH ATI / PTO Numbers**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-013	4817 / 0	16	Vertical, unobstructed	8	178	2,486
SEP-050	4825 / 0	16	Vertical, unobstructed	8	190	1,466
SEP-051	4826 / 0	55	Vertical, unobstructed	8	143	2,486

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

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-025
Process Area: 60% GLUTEN MEAL

Table Gluten Meal-9. Associated Equipment.

EP	EU	Associated EP	EU Description	Raw Material/ Fuel	Rated Capacity	Process Area	CE ID	CE Description
SEP-025	EU-6	SEP-006	#2 Fluid Bed Germ Dryer Bypass	Corn Germ	95,000 lb/hr	Germ	CE-6A, CE-6B, CE-6C	Cyclone, Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-12	SEP-016	Fiber Feed – Wet Feed System Bypass	Fiber Feed	48,000 gal/hr	Germ	CE-16E	Horizontal Cross Flow Scrubber
SEP-025	EU-16A	SEP-016	Germ Dryer Vent System #1 Bypass	Corn Germ	32 ton/hr	Germ	CE-16A, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-16B	SEP-016	Germ Dryer Vent System #2 Bypass	Corn Germ	32 ton/hr	Germ	CE-16B, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-16C	SEP-016	Germ Dryer Vent System #3 Bypass	Corn Germ	32 ton/hr	Germ	CE-16C, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-16D	SEP-016	Germ Dryer Vent System #4 Bypass	Corn Germ	32 ton/hr	Germ	CE-16D, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-11A	None	Gluten Meal Dryer #1	Gluten Meal	7.7 ton/hr	60% Gluten Meal	CE-11, CE-25	Multivane Scrubber, Centrified Scrubber System
SEP-025	EU-11B	None	Gluten Meal Dryer #1– Natural Gas	Natural Gas	0.08 MMCF/hr			

SEP-025	EU-19A	None	Fiber Feed Dryer #1	Fiber Feed	15.75 ton/hr	21% Fiber Feed	CE-19, CE-25	Multivane Scrubber, Centrified Scrubber System
SEP-025	EU-19B	None	Fiber Feed Dryer #1– Natural Gas	Natural Gas	0.08 MMCF/ hr			
SEP-025	EU-30A	None	Fiber Feed Dryer #2	Gluten Feed	15.75 ton/hr	21% Fiber Feed	CE-30, CE-25	Multivane Scrubber, Centrified Scrubber System
SEP-025	EU-30B	None	Fiber Feed Dryer #2– Natural Gas	Natural Gas	0.08 MMCF/ 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): 10%
Authority for Requirement: LCPH ATI 2424 / PTO 3099

Pollutant: PM-10
Emission Limit(s): 26.84 lb/hr, 117.54 tpy
Authority for Requirement: LCPH ATI 2424 / PTO 3099

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

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

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 9.28 lbs/hr, 40.66 tpy
Authority for Requirement: LCPH ATI 2424 / PTO 3099

Table Gluten Meal-10. 1992 Corn Grind Expansion Emission Limits

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-025	EU-6 EU-16A EU-16B EU-16C EU-16D EU-11A EU-11B EU-19A EU-19B EU-30A EU-30B	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

This source shall have a wet scrubber installed on each tower, operating, and maintained when the gluten feed and gluten meal dryers are operating. All appropriate probes and gauges needed to measure the parameters outlined in "Compliance Monitoring" shall be installed and maintained in a good operating condition.

Gas meters shall be installed and operational to determine natural gas consumption for those sources that use natural gas as a prime source of heat.

Authority for Requirement: LCPH ATI 2424 / PTO 3099

Operating Limits:

The process rate, as defined in the Linn County Code of Ordinances,Chapter10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.

Airflow from emission point #025 shall not exceed 96,187 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.

Inlet gas temperatures for each dryer included in this source shall adhere to the following temperature limits. These parameters shall not be significantly exceeded during normal plant operation. Significant and continued exceedances of these established parameters will be a violation of this permit condition. For the purpose of this order, "significant" shall mean any running 8 hr average which varies from the documented parameter by 10%.

Sampling Point	Compliance Temperature	10% Exceedance
Dryer Inlet	1150 ºF	1265 ºF
Dryer Outlet	335 ºF	391 ºF

This temperature shall be checked and recorded once every 2-hour period. A data logger may be substituted for the 2-hour checks, if it will maintain a running 8 hr average.

The fresh makeup water flow to the wet scrubber shall be maintained at a minimum of 100 gallons per minute.
Authority for Requirement: LCPH ATI 2424 / PTO 3099

Compliance Monitoring :
The following information shall be monitored:
Daily pressure drop readings and/or visual check of stack discharge.
Daily fresh water flow to the scrubber
Inlet and outlet gas temperature
Natural gas usage for this source
Inlet and outlet temperature shall be checked and recorded once every 2-hour period. A data logger may be substituteed for the 2-hour checks, if it will maintain a running 8 hour average.
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 2424 / PTO 3099

Record keeping Requirements:
A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three (3) years, unless otherwise noted:
Weekly average of facility grind rate
Dryer inlet and outlet temperatures
Daily fresh water flow to the scrubber
Daily pressure drop readings and/or visual check of stack discharge (kept for 6 months minimum)
Records of all maintenance and repair completed on the control device.
These records shall be available on site for reviewing by air pollution control personnel
Authority for Requirement: LCPH ATI 2424 / PTO 3099

Reporting:
Submit a quarterly report summarizing the weekly average facility grind rate and the dryer inlet and outlet temperatures by the 15th of each month for the previous quarter (January 15, April 15, July 15 and October 15)
Authority for Requirement: LCPH ATI 2424 / PTO 3099

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first year of permit term
2nd Stack Test to be Completed between –2.5 years to 3.5 years of permit term
Test Method – Iowa Compliance Sampling Manual or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first year of permit term

2nd Stack Test to be Completed between – 2.5 years to 3.5 years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 6C (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Nitrogen Oxide (NO_x)
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 7E (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

Stack testing for this emission point is waived if EP 190, 191, and 192 are operational before December 31, 2007. Once operational, EP 025 will be closed and emissions from associated units will exhaust through EP 190, 191, 192. If emission points 190, 191, 192 are not online by December 31, 2007, the monitoring requirements listed above will be required to be completed.

Opacity Monitoring:
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

If an opacity > 10% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(3)

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)

Refer to Appendix I, Agency O & M Plans, for the complete agency operation and maintenance plan.

Emission Point ID Number: SEP-048
Process Area: 60% GLUTEN MEAL

Associated Equipment
Associated Emission Unit ID Numbers: EU-48
Emissions Control Equipment ID Number: CE-48
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-48
Emission Unit Description: Gluten Meal Hammermill
Raw Material/Fuel: Gluten Meal
Rated Capacity: 21.10 ton/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): 10%
Authority for Requirement: LCPH ATI 2430 / PTO 3103

Pollutant: PM-10
Emission Limit(s): 0.58 lb/hr, 2.54 tpy[1]
Authority for Requirement: LCPH ATI 2430 / PTO 3103

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

[1]Emission rate requested by ADM as part of the facility's 1992 grind expansion.

Table Gluten Meal-11. 1992 Corn Grind Expansion Emission Limits

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-048	EU-48	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate emissions. The control equipment shall be maintained on this source in a good operating condition at all times. All appropriate probes and gauges needed to measure the parameters outlined in Compliance Monitoring shall be installed maintained in good operating condition.
Authority for Requirement: LCPH ATI 2430 / PTO 3103

Operating Limits:

Airflow to the baghouse shall be limited to 21,601 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.
The process rate, as defined in the Linn County Code of Ordinances, Chapter 10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.
Authority for Requirement: LCPH ATI 2430 / PTO 3103

Compliance Monitoring:

The following information shall be monitored:
Daily pressure drop readings and /or visual check of stack discharge
All monitor shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 2430 / PTO 3103

Recordkeeping Requirements:

A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three years, unless noted otherwise.
Weekly average of facility grind rate
Daily pressure drop readings and/or visual check of stack discharge (kept for 6 months minimum)
Records of all maintenance and repair completed on the control device.
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 2430 / PTO 3103

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by - within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10

1st Stack Test to be Completed by - within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-049
Process Area: 60% GLUTEN MEAL

Associated Equipment
Associated Emission Unit ID Numbers: EU-49
Emissions Control Equipment ID Number: CE-49
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-49
Emission Unit Description: Milling Storage – Gluten Meal
Raw Material/Fuel: Gluten Meal
Rated Capacity: 21.1 ton/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): 10%
Authority for Requirement: LCPH ATI 2431 / PTO 3104
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.12 lb/hr, 0.53 tpy[1]
Authority for Requirement: LCPH ATI 2431 / PTO 3104

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

Table Gluten Meal-12. 1992 Corn Grind Expansion Emission Limits

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-049	EU-49	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate emissions. The control equipment shall be maintained on this source in good operating condition at all times. All appropriate probes and gauges needed to measure the parameters outlined in Compliance Monitoring shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 2431 / PTO 3104

Operating Limits:

Airflow to the baghouse shall be limited to 5, 239 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.
The process rate, as defined in the Linn County Code of Ordinances, Chapter 10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.
Authority for Requirement: LCPH ATI 2431 / PTO 3104

Compliance Monitoring:

The following information shall be monitored:
Daily pressure drop readings and /or visual check of stack discharge.
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 2431 / PTO 3104

Recordkeeping Requirements:

A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three years, unless noted otherwise.
Weekly average of facility grind rate
Daily pressure drop readings and/or visual check of stack discharge (kept for 6 months minimum)
Records of all maintenance and repair completed on the control device
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 2431 / PTO 3104

Monitoring Requirements

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

Stack testing is not required at this time.

Opacity Monitoring:

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

action does not return the observation to no visible emissions, then a Method 9 observation will be required.

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-086
Process Area: 60% GLUTEN MEAL

Table Gluten Meal-13. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE-ID	CE Description
SEP-086	EU-86A	Gluten Truck Loading	Gluten	200 ton/hr	CE-86A	Baghouse
SEP-086	EU-86B	Gluten Rail Loading	Gluten	200 ton/hr	CE-86B	Baghouse

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 10%
Authority for Requirement: LCPH ATI 3219 / PTO 3354
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.83 lb/hr[1]
Authority for Requirement: LCPH ATI 3219 / PTO 3354

Pollutant: Particulate Matter
Emission Limit(s): 0.83 lb/hr[2]
Authority for Requirement: LCPH ATI 3219 / PTO 3354

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.84 gr/dscf
Authority for Requirement: LCPH ATI 3219 / PTO 3354
567 IAC 23.4(7)
LCO 10.9(1)"g"

[1]Emission rate used to demonstrate no exceedance of the National Ambient Air Quality Standards (NAAQS).
[2]It is assumed that PM is equal to PM10.

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate matter emissions on both the truck unloading and railcar unloading. The control equipment shall be maintained on this source in a good operating condition at all times. All appropriate probes and gauges needed to measure the parameters outlined in "Compliance Monitoring" shall be installed and maintained in a good operating condition.

Authority for Requirement: LCPH ATI 3219 / PTO 3354

Operating Limits:

Airflow to each of the two baghouses shall be limited to 2,400 dscfm. Any increase in airflow would be considered a mojor modification and would necessitate a new authorization to install permit.

Authority for Requirement: LCPH ATI 3219 / PTO 3354

Compliance Monitoring:

The following information shall be monitored:

Daily pressure drop readings

Authority for Requirement: LCPH ATI 3219/ PTO 3354

Recordkeeping Requriements:

A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three years.

Daily pressure drop readings

Records of all maintenance and repair completed on the control device.

Authority for Requirement: LCPH ATI 3219 / PTO 3354

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter

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

Test Method – Iowa Compliance Sampling Manual

Authority for Requirement – 567 IAC 22.108(3)

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

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Refer to Appendix I, Agency O & M Plans, for the complete agency operation and maintenance plan.

Emission Point ID Number: SEP-226, SEP-230
Process Area: 60% GLUTEN MEAL

Table Gluten Meal-14. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SEP-226	EU-226	Gluten Filter Vacuum Pumps Vent	Gluten	17.93 ton/hr
SEP-230	EU-230	16, 17, 18 Gluten Filter Vacuum Pump Vents	Gluten	2.69 ton/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.

Table Gluten Meal-15. Emission Limits.

EP	EU	SO_2	VOC	ATI / PTO #
SEP-226	EU-226	500 ppmv	0.04 lb/hr, 0.19 tpy	4839 / 0
SEP-230	EU-230	500 ppmv	0.04 lb/hr, 0.16 tpy	4838 / 0

Table Gluten Meal-16. General Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-226 SEP-230	EU-226 EU-230	SO_2	500 ppmv	567 IAC 23.3(3)"e" LCO 10.12(2)

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

Table Gluten Meal-17. Emission Point Characteristics.

		Stack Characteristics				
EP	LCPH ATI / PTO Numbers	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Exhaust Temp. (°F)	Exhaust Flowrate (scfm)
SEP-226	4839 / 0	58	Horizontal	34	124	140
SEP-230	4838 / 0	72	Vertical, unobstructed	8	99	103

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

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

Monitoring Requirements

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

Stack testing is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-006
Process Area: GERM

Associated Equipment
Associated Emission Unit ID Numbers: EU-6
Emissions Control Equipment ID Number: CE-6A, CE-6B, CE-6C
Emissions Control Equipment Description: Cyclone, Cyclone, Horizontal Cross Flow Scrubber

---

Emission Unit vented through this Emission Point: EU-6
Emission Unit Description: #2 Fluid Bed Germ Dryer
Raw Material/Fuel: Corn Germ
Rated Capacity: 95,000 lb/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 10%
Authority for Requirement: LCPH ATI 2418 / PTO 3093

Pollutant: PM-10
Emission Limit(s): 4.35 lb/hr, 19.04 tpy[1]
Authority for Requirement: LCPH ATI 2418 / PTO 3093

Pollutant: Particulate Matter
Emission Limit(s): 4.35 lb/hr, 19.04 tpy[2]
Authority for Requirement: LCPH ATI 2418 / PTO 3093

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

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

[1]Emission rate requested by ADM as part of the facility's 1992 grind expansion.
[2]It is assumed that PM is equal to PM10.

Table Germ-1. 1992 Corn Grind Expansion Emission Limits

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-006	EU-6	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

This source shall have a wet scrubber installed, operating, and maintained when the fluid bed germ dryer is operating. All appropriate probes and gauges needed to measure the parameters outlined in "Compliance Monitoring" shall be installed and maintained in a good operating condition.

Authority for Requirement: LCPH ATI 2418 / PTO 3093

Operating Limits:

Airflow to the wet scrubber shall be limited to 80,787 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.

The fresh water flow to the wet scrubber shall be maintained at a minimum of 600 gpm.[1]

The process rate, as defined in the Linn County Code of Ordinances, Chapter 10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.

Authority for Requirement: LCPH ATI 2418 / PTO 3093

[1] ADM currently recirculates the water in the scrubber. An ATI has been issued for this source with revised scrubber water flow requirements. The revised permit conditions will be included in the TV permit once compliance testing has been completed and a PTO has been issued.

Compliance Monitoring:

The following information shall be monitored:

Daily pressure drop readings and/or visual check of stack discharge

Daily fresh water flow to the scrubber

All monitors shall be easily accessible to air pollution personnel.

Authority for Requirement: LCPH ATI 2418/ PTO 3093

Recordkeeping Requirements:

A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three years, unless noted otherwise.

Weekly average of facility grind rate

Daily pressure drop readings and/or visual check of stack discharge (kept for 6 months minimum)

Daily fresh water flow to the scrubber

Records of all maintenance and repair completed on the control device
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 2418 / PTO 3093

Quarterly Report Requirements:
Submit a quarterly report summarizing weekly average of facility grind rate by the 15th of each month for the previous quarter (January 15, April 15, July 15, and October 15).
Submit excess emission reports as required in Linn County Ordinance, Chapter 10, Section 14.
Authority for Requirement: LCPH ATI 2418 / PTO 3093

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

Stack Testing:

Pollutant – PM-10
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 6C (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

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

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

attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-015
Process Area: GERM

Associated Equipment
Associated Emission Unit ID Numbers: EU-15
Emissions Control Equipment ID Number: CE-15A, CE-15B, CE-15C
Emissions Control Equipment Description: Cyclone, Cyclone, Entoleter Scrubber

---

Emission Unit vented through this Emission Point: EU-15
Emission Unit Description: #1 Fluid Bed Germ Dryer
Raw Material/Fuel: Corn Germ
Rated Capacity: 95,000 lb/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 10%
Authority for Requirement: LCPH ATI 4541 / PTO 4713

Pollutant: PM-10
Emission Limit(s): 2.79 lb/hr
Authority for Requirement: LCPH ATI 4541 / PTO 4713

Pollutant: Particulate Matter
Emission Limit(s): 0.005 gr/dscf, 2.79 lb/hr
Authority for Requirement: LCPH ATI 4541 / PTO 4713

Pollutant: Sulfur Dioxide (SO_2)[1,2]
Emission Limit(s): 90% control or ≤ 20 ppmv
Authority for Requirement: LCPH ATI 4541 / PTO 4713

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 5.17 lb/hr, 22.64 tpy
Authority for Requirement: LCPH ATI 4541 / PTO 4713

[1]All emission limitations (including operating parameter ranges and limits) apply at all times when the process equipment is operating, except, in the case of process equipment or pollution control systems, during previously planned startup and shutdown periods (including planned maintenance periods), and malfunctions as defined in 40 CFR 63. These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these events, ADM shall minimize emissions to the extent practicable. To the extent practicable,

startup and shutdown of pollution control systems will be performed during times when process equipment is also shut down. Also, ADM shall to the extent practicable, control emissions during a malfunction event in a manner consistent with good air pollution control practice for minimizing emissions.
Authority for Requirement: LCPH ATI 4541 / PTO 4713
ADM Consent Decree, Cedar Rapids Control Technology Plan Section 7.0, Footnote 1.

[2]Negotiated under United States v. ADM (C.D. IL, No. 03-CV-2066)

Table Germ-2. 1992 Corn Grind Expansion Emission Limits

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-015	EU-15	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

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

Control Device:
A scrubber shall be used to control sulfur dioxide emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4541 / PTO 4713

Operating Limits:
Water flow to the scrubber shall be greater than 400 gallons per minute
pH of the scrubbing liquor shall be maintained above 6.8.
Pressure drop across the scrubber shall be monitored for significant changes.
Authority for Requirement: LCPH ATI 4541 / PTO 4713

Operating Condition Monitoring and Recordkeeping:
The following shall be monitored and recorded:
Daily pressure drop readings
Daily dryer bed temperature readings
Daily scrubber water flow rate
Daily scrubber pH
Visible emissions shall be observed on a weekly basis to ensure that no visible emissions occur during material handling of the unit
Maintenance and repair completed on the control unit

Weekly average grind rate
Maintain copies of source test results until a new approved representative test is conducted or for five (5) years, whichever is longer
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Authority for Requirement: LCPH ATI 4541 / PTO 4713

Quarterly Report Requirements:
The following information shall be submitted to this department by the 15th of each month for the previous quarter (January 15, April 15, July 15, and October 15).
Submit a quarterly report summarizing the weekly average grind rate for each month of the quarter.
Authority for Requirement: LCPH ATI 4541 / PTO 4713

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

Stack Height, (ft, from the ground): 146
Discharge Style: Vertical, Unobstructed
Stack Opening, (inches, diameter): 60
Exhaust Temperature (°F): 135
Exhaust Flow Rate (scfm): 65,000
Authority for Requirement: LCPH ATI 4541 / PTO 4713

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

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)

1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 6C (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Refer to Appendix I, Agency O & M Plans, for the complete agency operation and maintenance plan.

Emission Point ID Number: SEP-016
Process Area: GERM

Table Germ-3. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE-ID	CE Description
SEP-016	EU-12	Fiber Feed – Wet Feed System	Fiber Feed	48,000 gal/hr	CE-16E	Horizontal Cross Flow Scrubber
SEP-016	EU-16A	Germ Dryer Vent System #1	Corn Germ	32 ton/hr	CE-16A, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-016	EU-16B	Germ Dryer Vent System #2	Corn Germ	32 ton/hr	CE-16B, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-016	EU-16C	Germ Dryer Vent System #3	Corn Germ	32 ton/hr	CE-16C, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-016	EU-16D	Germ Dryer Vent System #4	Corn Germ	32 ton/hr	CE-16D, CE-16E	Cyclone, Horizontal Cross Flow Scrubber

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 10%
Authority for Requirement: LCPH ATI 4089 / PTO 4085
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.43 lb/hr, 1.87 tpy[1]
Authority for Requirement: LCPH ATI 4089 / PTO 4085

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 4.7 lb/hr, 20.59 tpy
Authority for Requirement: LCPH ATI 4089 / PTO 4085

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

[1]Emission rate requested by ADM as part of the facility's 1992 grind expansion.
[2]It is assumed that PM is equal to PM10.

Table Germ-4. 1992 Corn Grind Expansion Emission Limits

EP	**EU**	**Pollutant**	**Emission Limit(s)**	Authority for Requirement
SEP-016	EU-16A EU-16B EU-16C EU-16D	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

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

Control Device:
This source shall have a wet scrubber installed, operating, and maintained when the germ dryers and/or wet feed tanks are in operation. All appropriate probes and gauges needed to measure the parameters outlined in Compliance Monitoring shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 4089 / PTO 4085

Operating Limits:
Airflow from the wet scrubber is 91,770 scfm. Any change in airflow shall be evaluated according to Linn County Ordinance 10.5.
Water feed rates through the scrubber vessel shall be maintained at a level not less than 610 gpm.
The recirculation liquid through the scrubber vessel shall be maintained at a pH greater than 5 at all times.
The process rate, as defined in the Linn County Code of Ordinances, Chapter 10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.
Authority for Requirement: LCPH ATI 4089 / PTO 4085

Compliance Monitoring:

The following information shall be monitored:
Pressure drop readings across scrubber vessel
Total water flow through scrubber vessel (gpm)
Recirculation liquid pH in scrubber vessel
All instruments and control equipment will be calibrated, maintained, and operated according to good manufacturing practices.
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 4089 / PTO 4085

Monitoring Methods and Corrective Guidelines
The facility shall perform timely corrective action during periods of excursion where the monitoring indicators fall out of range. Primary indicators that require monitoring are specified in Compliance Monitoring of this permit. Corrective action should include an investigation into the reason for the excursion, evaluation of the situation and necessary follow-up action to return the operation within the indicator range.
The appropriate measures and/or action plan for remediation if the indicators fall outside the normal operating range are:
Either the control equipment causing the problem 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 problem and to correct it within a reasonable amount of time.
A reasonable amount of time is eight (8) hours plus the period of time required to shutdown the process without damaging the process equipment or control equipment.

Excursion Recordkeeping:
The facility shall maintain a record for excursions defined where the monitoring indicators fell outside the range. The log shall consist of date, time, and cause of excursion and corrective action taken.
If corrective action fails to return the indicators to the appropriate range within eight (8) hours, the facility shall report the excursion to this department.
These records shall be maintained on-site for five (5) years and available at all times for viewing by Linn County air quality control personnel.
Authority for Requirement: LCPH ATI 4089 / PTO 4085

Recordkeeping Requirements:
A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than five years, unless noted otherwise.
Weekly average of facility grind rate
Weekly pressure drop of readings (kept for 6 months minimum)
Daily water flow through the scrubber vessel (gpm)
Daily recirculation liquid pH readings
Records of excursions as defined in Monitoring Methods and Corrective Guidelines
Note: The operation of an alarm system may be operated in lieu of daily/weekly logging of the water flow rates, pH, and pressure drop readings.
These records shall be available on site at all times for viewing by Linn County air quality control personnel.
Authority for Requirement: LCPH ATI 4089/ PTO 4085

Monitoring Requirements

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

Stack Testing:

Pollutant – Sulfur Dioxide (SO_2)
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 6C (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Refer to Appendix I, Agency O & M Plans, for the complete agency operation and maintenance plan.

Emission Point ID Number: SEP-021

Process Area: GERM

Associated Equipment
Associated Emission Unit ID Numbers: EU-21
Emissions Control Equipment ID Number: CE-21A, CE-21B, CE-21C
Emissions Control Equipment Description: Cyclone, Cyclone, Multivane Scrubber

---

Emission Unit vented through this Emission Point: EU-21
Emission Unit Description: Germ – Cooling System
Raw Material/Fuel: Corn Germ
Rated Capacity: 95 ton/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): 20%
Authority for Requirement: LCPH ATI 4819 / PTO 0

Pollutant: PM-10
Emission Limit(s): 0.16 lb/hr, 0.68 tpy
Authority for Requirement: LCPH ATI 4819 / PTO 0

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

Pollutant: VOC
Emission Limit(s): 2.16 lbs/hr, 9.46 tpy
LCPH ATI 4819/ PTO 0

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

Control Device:
Dual cyclones and a wet scrubber shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes and gauges needed to measure the parameters outlined in Compliance Monitoring shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 4819 / PTO 0
Operating Limits:
The facility-wide grind shall be limited to 450,000 bushels of corn per day based on a 52-week rolling average.
Makeup water to the scrubber shall be no less than 104 gallons per minute.

The scrubber on this unit shall be maintained according to the manufacturer's specifications and/or good operating practices.
Authority for Requirement: LCPH ATI 4819 / PTO 0

Operating Condition Monitoring and Recordkeeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Monitor and record the pressure differential across the scrubber on a daily basis.
Monitor and record the fresh water flow to the scrubber on a daily basis.
Monitor and record the recycle water flow to the scrubber on a daily basis.
Record all maintenance and repair completed on the control devices.
Authority for Requirement: LCPH ATI 4819 / PTO 0

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

Stack Height, (ft, from the ground): 54
Discharge Style: Vertical, Unobstructed
Stack Opening, (inches, diameter): 30
Exhaust Temperature (°F): 105
Exhaust Flow Rate (scfm): 16,298
Authority for Requirement: LCPH ATI 4819 / PTO 0

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

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within 60 days after achieving maximum production rate and no later than one hundred eighty days after the initial startup date of the proposed equipment
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement – LCPH ATI 4819 / PTO 0

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in

the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-025
Process Area: GERM

Table Germ-6. Associated Equipment.

EP	EU	Associated EP	EU Description	Raw Material / Fuel	Rated Capacity	Process Area	CE ID	CE Description
SEP-025	EU-6	SEP-006	#2 Fluid Bed Germ Dryer	Corn Germ	95,000 lb/hr	Germ	CE-6A, CE-6B, CE-6C	Cyclone, Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-12	SEP-016	Fiber Feed – Wet Feed System	Fiber Feed	48,000 gal/hr	Germ	CE-16E	Horizontal Cross Flow Scrubber
SEP-025	EU-16A	SEP-016	Germ Dryer Vent System #1	Corn Germ	32 ton/hr	Germ	CE-16A, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-16B	SEP-016	Germ Dryer Vent System #2	Corn Germ	32 ton/hr	Germ	CE-16B, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-16C	SEP-016	Germ Dryer Vent System #3	Corn Germ	32 ton/hr	Germ	CE-16C, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-16D	SEP-016	Germ Dryer Vent System #4	Corn Germ	32 ton/hr	Germ	CE-16D, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-11A	None	Gluten Meal Dryer #1	Gluten Meal	7.7 ton/hr	60% Gluten Meal	CE-11, CE-25	Multivane Scrubber, Centrified Scrubber System
SEP-025	EU-11B	None	Gluten Meal Dryer #1– Natural Gas	Natural Gas	0.08 MMCF / hr			
SEP-025	EU-19A	None	Fiber Feed Dryer #1	Fiber Feed	15.75 ton/hr	21% Fiber Feed	CE-19, CE-25	Multivane Scrubber, Centrified Scrubber System
SEP-025	EU-19B	None	Fiber Feed Dryer #1– Natural Gas	Natural Gas	0.08 MMCF / hr			

SEP-025	EU-30A	None	Fiber Feed Dryer #2	Gluten Feed	15.75 ton/hr	21% Fiber Feed	CE-30, CE-25	Multivane Scrubber, Centrified Scrubber System
SEP-025	EU-30B	None	Fiber Feed Dryer #2– Natural Gas	Natural Gas	0.08 MMCF / hr			

Applicable Requirements

See SEP-025 under the 60% Gluten Meal process area for applicable requirements.

Authority for Requirement: LCPH ATI 2424 / PTO 3099

Emission Point ID Number: SEP-040
Process Area: GERM

Associated Equipment
Associated Emission Unit ID Numbers: EU-40
Emissions Control Equipment ID Number: CE-40
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-40
Emission Unit Description: Germ to Storage
Raw Material/Fuel: Corn Germ
Rated Capacity: 95 ton/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): 20%
Authority for Requirement: LCPH ATI 4822 / PTO 0
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.37 lb/hr, 1.62 tpy
Authority for Requirement: LCPH ATI 4822 / PTO 0

Pollutant: Particulate Matter
Emission Limit(s): 0.37 lb/hr, 1.62 tpy
Authority for Requirement: LCPH ATI 4822 / PTO 0

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: LCPH ATI 4822 / PTO 0
567 IAC 23.4(7)
LCO 10.9(1)"g"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.63 lb/hr, 2.74 tpy
Authority for Requirement: LCPH ATI 4822 / PTO 0

Operational Limits & Requirements

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

Control Device:
A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4822 / PTO 0

Operating Limits:
The facility-wide grind shall be limited to 450,000 bushels of corn per day based on a 52-week rolling average.
The pressure differential measured across the baghouse shall be greater than one (1) inch of water column and less than six (6) inches of water column.
The baghouse on this unit shall be maintained according to the manufacturer's specifications and/or good operating practices.
Authority for Requirement: LCPH ATI 4822 / PTO 0

Operating Condition Monitoring and Recordkeeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Record the weekly average facility grind rate.
Monitor and record the pressure differential across the baghouse on a weekly basis.
Record all maintenance and repair completed on the control device.
Authority for Requirement: LCPH ATI 4822 / PTO 0

<u>Emission Point Characteristics</u>
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 24
Discharge Style: Vertical, unobstructed
Stack Opening, (inches, diameter): 14
Exhaust Temperature (°F): 120
Exhaust Flow Rate (acfm): 4,943
Authority for Requirement: LCPH ATI 4822 / PTO 0

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

<u>Monitoring Requirements</u>

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

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.
Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-005
Process Area: 21% FIBER FEED

Table Fiber Feed-1. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	Process Area	CE ID	CE Description
SEP-005	EU-18A	Gluten Meal Dryer #2	Gluten Meal	15.10 ton/hr	60% Gluten Meal	CE-18, CE-5B	Multivane Scrubber, Packed Tower Scrubber
SEP-005	EU-18B	Gluten Meal Dryer #2 – Natural Gas	Natural Gas	0.13 MMCF/ hr			
SEP-005	EU-43A	Fiber Feed Dryer #3	Fiber Feed	20 ton/hr	21% Fiber Feed	CE-43, CE-5B	Multivane Scrubber, Packed Tower Scrubber
SEP-005	EU-43B	Fiber Feed Dryer #3 – Natural Gas	Natural Gas	0.08 MMCF/ hr			
SEP-005	EU-G54A	Fiber Feed Dryer #4	Fiber Feed	45 ton/hr	21% Fiber Feed	CE-5C, CE-5A	Scrubber, Packed Tower Scrubber
SEP-005	EU-G54B	Fiber Feed Dryer #4 – Natural Gas	Natural Gas	0.19 MMCF/ hr			
SEP-005	EU-G55A	Fiber Feed Dryer #5	Fiber Feed	45 ton/hr	21% Fiber Feed	CE-5D, CE-5A	Scrubber, Packed Tower Scrubber
SEP-005	EU-G55B	Fiber Feed Dryer #5 – Natural Gas	Natural Gas	0.19 MMCF/ 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): 10%
Authority for Requirement: LCPH ATI 2417 / PTO 3092

Pollutant: PM-10
Emission Limit(s): 17.27 lb/hr, 75.65 tpy
Authority for Requirement: LCPH ATI 2417 / PTO 3092

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: LCO 10.9(1)"g"
567 IAC 23.4(7)

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

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 9.28 lbs/hr, 40.66 tpy
Authority for Requirement: LCPH ATI 2417 / PTO 3092

Table Fiber Feed-2. 1992 Corn Grind Expansion Emission Limits

EP	**EU**	**Pollutant**	**Emission Limit(s)**	Authority for Requirement
SEP-005	EU-18A EU-18B EU-43A EU-43B EU-G54A EU-G54B EU-G55A EU-G55B	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

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

Control Device:
This source shall have a wet scrubber installed on each tower, operating, and maintained when the gluten feed and gluten meal dryers are operating. All appropriate probes and gauges needed to measure the parameters outlined in "Compliance Monitoring" shall be installed and maintained in a good operating condition.

Gas meters shall be installed and operational to determine natural gas consumption for those sources that use natural gas as a prime source of heat.
Authority for Requirement: LCPH ATI 2417 / PTO 3092

Operating Limits:
The process rate, as defined in the Linn County Code of Ordinances,Chapter10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.

Airflow from emission point #005 shall not exceed 327,197 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.

Inlet gas temperatures for each dryer included in this source shall adhere to the following temperature limits. These parameters shall not be significantly exceeded during normal plant operation. Significant and continued exceedances of these established parameters will be a violation of this permit condition. For the purpose of this order, "significant" shall mean any running 8 hour average which varies from the documented parameter by 10%.

Sampling Point	Compliance Temperature	10% Exceedance
Dryer Inlet	1150 ºF	1265 ºF
Dryer Outlet	255 ºF	281 ºF

This temperature shall be checked and recorded once every 2-hour period. A data logger may be substituted for the 2-hour checks, if it will maintain a running 8 hour average.

The makeup water flow to each main wet scrubber shall be maintained at a minimum of 5340 gallons per minute.
Authority for Requirement: LCPH ATI 2417 / PTO 3092

Compliance Monitoring :
The following information shall be monitored:
Daily pressure drop readings and/or visual check of stack discharge
Daily water flow to the scrubber
Inlet and outlet gas temperature
Natural gas usage for this source
Inlet and outlet temperature shall be checked and recorded once every 2-hour period. A data logger may be substituteed for the 2-hour checks, if it will maintain a running 8-hour average.
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 2417 / PTO 3092

Record keeping Requirements:
A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three (3) years:
Weekly average of facility grind rate
Dryer inlet and outlet temperatures
Daily water flow to the scrubber
Daily pressure drop readings and/or visual check of stack discharge (kept for 6 months minimum)
Records of all maintenance and repair completed on the control device.
These records shall be available on site for reviewing by air pollution control personnel
Authority for Requirement: LCPH ATI 2417 / PTO 3092

Reporting:

Submit a quarterly report summarizing the weekly average facility grind rate and the dryer inlet and outlet temperatures by the 15th of each month for the previous quarter (January 15, April 15, July 15 and October 15)
Authority for Requirement: LCPH ATI 2417 / PTO 3092

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first year of permit term
2nd Stack Test to be Completed between – after 2.5 yrs & before 3.5 yrs of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 6C (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Nitrogen Oxides (NO_x)
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 7E (40 CFR 60) or approved alternative
Authority for Requirement - 567 IAC 22.108(3)

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

Stack testing for this emission point is waived if EP 190, 191, and 192 are operational prior to the issuance date of this permit. Once operational, EP 5 will be closed and emissions from associated units will exhaust through EP 190, 191, 192. If emission points 190, 191, 192 are not online by the date of this permit issuance, the monitoring requirements listed above will be required to be completed.

Opacity Monitoring:

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 22.108(3)

Refer to Appendix I, Agency O & M Plans, for the complete agency operation and maintenance plan.

Emission Point ID Number: SEP-018, SEP-026, SEP-027, SEP-043
Process Area: 21% FIBER FEED

Table Fiber Feed -3. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-018	EU-18A	Gluten Meal Dryer #2	Gluten Meal	15.1 ton/hr	CE-018	Multivane Scrubber
SEP-018	EU-18B	Gluten Meal Dryer #2– Natural Gas	Natural Gas	0.13 MMCF/ hr	CE-018	Multivane Scrubber
SEP-026	EU-26A	Fiber Feed Dryer #4	Fiber Feed	45 ton/hr	CE-026	Multivane Scrubber
SEP-026	EU-26B	Fiber Feed Dryer #4– Natural Gas	Natural Gas	0.19 MMCF/ hr	CE-026	Multivane Scrubber
SEP-027	EU-27A	Fiber Feed Dryer #5	Fiber Feed	45 ton/hr	CE-027	Multivane Scrubber
SEP-027	EU-27B	Fiber Feed Dryer #5– Natural Gas	Natural Gas	0.19 MMCF/ hr	CE-027	Multivane Scrubber
SEP-043	EU-43	Fiber Feed Dryer #3	Fiber Feed	20 ton/hr	CE-043	Multivane Scrubber
SEP-043	EU-43B	Fiber Feed Dryer #3- Natural Gas	Natural Gas	0.08 mmcf/hr	CE-043	Multivane Scrubber

Applicable Requirements

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

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

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

Operational Limits & Requirements

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

Operating Limits:

This source shall only exhaust air from the dryer chambers prior to the dryer igniters being activated.

No combustion gases and no feed shall be added to the dryer while the dryer exhaust is venting through the bypass.

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

Authority for Requirement: LCPH ATI 5347 / PTO 5221
LCPH ATI 5349 / PTO 5223
LCPH ATI 5350 / PTO 5224
LCPH ATI 5352 / PTO 5226

Record keeping Requirements:

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

Record the date and duration of each purge exhausted through the bypass stack.

All maintenance and repair completed on the control device.

Authority for Requirement: LCPH ATI 5347 / PTO 5221
LCPH ATI 5349 / PTO 5223
LCPH ATI 5350 / PTO 5224
LCPH ATI 5352 / PTO 5226

Monitoring Requirements

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

Periodic monitoring is not required at this time.

Opacity Monitoring:

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-025
Process Area: 21% FIBER FEED

Table Fiber Feed-4. Associated Equipment.

EP	EU	Associated EP	EU Description	Raw Material / Fuel	Rated Capacity	Process Area	CE ID	CE Description
SEP-025	EU-6	SEP-006	#2 Fluid Bed Germ Dryer Bypass	Corn Germ	95,000 lb/hr	Germ	CE-6A, CE-6B, CE-6C	Cyclone, Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-12	SEP-016	Fiber Feed – Wet Feed System Bypass	Fiber Feed	48,000 gal/hr	Germ	CE-16E	Horizontal Cross Flow Scrubber
SEP-025	EU-16A	SEP-016	Germ Dryer Vent System #1 Bypass	Corn Germ	32 ton/hr	Germ	CE-16A, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-16B	SEP-016	Germ Dryer Vent System #2 Bypass	Corn Germ	32 ton/hr	Germ	CE-16B, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-16C	SEP-016	Germ Dryer Vent System #3 Bypass	Corn Germ	32 ton/hr	Germ	CE-16C, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-16D	SEP-016	Germ Dryer Vent System #4 Bypass	Corn Germ	32 ton/hr	Germ	CE-16D, CE-16E	Cyclone, Horizontal Cross Flow Scrubber
SEP-025	EU-11A	None	Gluten Meal Dryer #1	Gluten Meal	7.7 ton/hr	60% Gluten Meal	CE-11, CE-25	Multivane Scrubber, Centrified Scrubber System
SEP-025	EU-11B	None	Gluten Meal Dryer #1– Natural Gas	Natural Gas	0.08 MMCF / hr			
SEP-025	EU-19A	None	Fiber Feed Dryer #1	Fiber Feed	15.75 ton/hr	21%		Multivane Scrubber,

SEP-025	EU-19B	None	Fiber Feed Dryer #1– Natural Gas	Natural Gas	0.08 MMCF / hr	Fiber Feed	CE-19, CE-25	Centrified Scrubber System
SEP-025	EU-30A	None	Fiber Feed Dryer #2	Gluten Feed	15.75 ton/hr	21% Fiber Feed	CE-30, CE-25	Multivane Scrubber, Centrified Scrubber System
SEP-025	EU-30B	None	Fiber Feed Dryer #2– Natural Gas	Natural Gas	0.08 MMCF / hr			

Applicable Requirements

See SEP-025 under the 60% Gluten Meal process area for applicable requirements.

Authority for Requirement: LCPH ATI 2424 / PTO 3099

Emission Point ID Number: SEP-032
Process Area: 21% FIBER FEED

Associated Equipment
Associated Emission Unit ID Numbers : EU-32
Emissions Control Equipment ID Number: CE-32
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-32
Emission Unit Description: 21% Gluten Feed Steadman Mill D.C.
Raw Material/Fuel: Fiber Feed
Rated Capacity: 126.6 ton/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): 10%
Authority for Requirement: LCPH ATI 2426 / PTO 3100

Pollutant: PM-10
Emission Limit(s): 0.20 lb/hr, 0.86 tpy[1]
Authority for Requirement: LCPH ATI 2426 / PTO 3100

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

[1]Emission rate requested by ADM as part of the facility's 1992 grind expansion.

Table Fiber Feed 5. 1992 Corn Grind Expansion Emission Limits

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-032	EU-32	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Compliance Monitoring" shall be installed, maintained and in good operating condition.
Authority for Requirement: LCPH ATI 2426 / PTO 3100

Operating Limits:

Airflow to the baghouse shall be limited to 42,113 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.
The process rate, as defined in the Linn County Code of Ordinances, Chapter 10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.
Authority for Requirement: LCPH ATI 2426 / PTO 3100

Compliance Monitoring:

The following information shall be monitored:
Daily pressure drop readings and/or visual check of stack discharge
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 2426 / PTO 3100

Recordkeeping Requirements:

A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three years, unless otherwise noted.
Weekly average of facility grind rate
Daily pressure drop readings and/or visual check of stack discharge (kept for 6 months minimum)
Records of all maintenance and repair completed on the air pollution control device
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 2426 / PTO 3100

Reporting:

Submit a quarterly report summarizing the first item in Condition #7 by the 15th of each month for the previous quarter (Jan. 15th, April 15, July 15, and Oct. 15).
Authority for Requirement: LCPH ATI 2426 / PTO 3100

Monitoring Requirements

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

Stack testing is not required at this time.

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.
Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-035
Process Area: 21% FIBER FEED

Associated Equipment
Associated Emission Unit ID Numbers : EU-35
Emissions Control Equipment ID Number: CE-35
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-35
Emission Unit Description: Fiber Feed Coolers
Raw Material/Fuel: Fiber Feed
Rated Capacity: 126.6 ton/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): 10%
Authority for Requirement: LCPH ATI 3321 / PTO 3504
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.72 lb/hr, 3.13 tpy
Authority for Requirement: LCPH ATI 3321 / PTO 3504

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

Table Fiber Feed 6. 1992 Corn Grind Expansion Emission Limits

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-035	EU-35	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained on this source in a good operating condition at all times. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Compliance Monitoring and Testing" shall be installed and maintained in good operating condition.
Authority for Requirement: LCPH ATI 3321 / PTO 3505

Operating Limits:

Airflow to the baghouse shall be limited to 24,400 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.
The process rate, as defined in the Linn County Code of Ordinances, Chapter 10, for this facility shall be limited to a weekly average of 450,000 bushel of corn per day.
Authority for Requirement: LCPH ATI 3321 / PTO 3505

Compliance Monitoring and Testing:

The following information shall be monitored:
Daily pressure drop readings and/or visual check of stack discharge
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 3321/ PTO 3505

Recordkeeping Requirements:

A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three years, unless noted otherwise.
Weekly average of facility grind rate
Daily pressure drop readings and/or visual check of stack discharge (kept for 6 months minimum)
Records of all maintenance and repair completed on the control device
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 3321 / PTO 3505

Reporting:

Submit a quarterly report summarizing the first item in "Recordkeeping Requirements" by the 15th of each month for the previous quarter (Jan. 15, April 15, July 15, and Oct. 15).
Authority for Requirement: LCPH ATI 3321 / PTO 3505

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

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

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site

for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-211
Process Area: 21% FIBER FEED

Associated Equipment
Associated Emission Unit ID Numbers : EU-211
Emissions Control Equipment ID Number: CE-211
Emissions Control Equipment Description: Packed Tower Scrubber

---

Emission Unit vented through this Emission Point: EU-211
Emission Unit Description: Feedhouse SO_2 Scrubbing System
Raw Material/Fuel: Fiber Feed
Rated Capacity: 126.6 ton/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: Sulfur Dioxide (SO_2)
Emission Limit(s): 6.11 lb/hr
Authority for Requirement: LCPH ATI 3947 / PTO 3949

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

Control Device:
This source shall have a wet scrubber installed, operating, and maintained at all times in a good operating condition. All appropriate probes and gauges needed to measure the parameters outlined in "Compliance Monitoring" shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 3947 / PTO 3949

Operating Limits:
This source shall control fugitive SO_2 emissions from the feedhouse area. Any modifications or alterations to the sources in the feedhouse area (as represented in Attachment A) that increase SO_2 emissions would be considered a major modification and will necessitate a new authorization to install permit.
The water flow to the wet scrubber shall be maintained at a minimum of 240 gpm. The fresh water make-up shall be maintained at a minimum of 40 gpm.
The process rate, as defined in the Linn County Code of Ordinances, Chapter 10, for this facility shall be limited to a weekly average of 450,000 bushels of corn per day.
Authority for Requirement: LCPH ATI 3947/ PTO 3949
Compliance Monitoring:

The following information shall be monitored to ensure continued compliance:
Pressure drop readings on scrubber unit
Water flow rate to the scrubber unit
Make-up water flow rate to scrubber unit
All monitoring devices shall be made accessible to air pollution control personnel
Authority for Requirement: LCPH ATI 3947 / PTO 3949

Recordkeeping Requirements:
A log of operation shall be maintained for the operation of the above listed unit. As a minimum, the following information shall be recorded. These records shall be available at all times for viewing by air pollution control personnel. The log shall consist of the following:
Daily check of scrubber pressure drop reading
Daily check of water flow rate to the scrubber
Daily check of make-up water flow rate to scrubber
Record of all maintenance and repairs completed on the control device
Record of any changes in the operation which would affect emissions
Authority for Requirement: LCPH ATI 3947/ PTO 3949

Emission Units Associated with this Source (Attachment A):
Attachment A:
#1 Wet Feed Drag
#2 Sharpless Drag
#2 Wet Feed Drag
#3 Wet Feed Drag
#3,4,5 Fiber Dryer Feed Drag
#1 Germ Drag
Germ Dryer Feed Drag
Sharpless Filtrate Tank Vent
East and West DSM Tank Vents
Authority for Requirement: LCPH ATI 3947 / PTO 3949

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

Stack testing is not required at this time.

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-001
Process Area: PELLET MILL

Associated Equipment
Associated Emission Unit ID Numbers: EU-1
Emissions Control Equipment ID Number: CE-1A, CE-1B
Emissions Control Equipment Description: Baghouse, Cyclone

Emission Unit vented through this Emission Point: EU-1
Emission Unit Description: Pellet Cooler Vent #4 Dust Collector
Raw Material/Fuel: Gluten Feed
Rated Capacity: 39 ton/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): 20%
Authority for Requirement: LCPH ATI 2080 / PTO 2185
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 1.0 lb/hr
Authority for Requirement: LCPH ATI 2080 / PTO 2185

Pollutant: Particulate Matter
Emission Limit(s): 1.0 lb/hr
Authority for Requirement: LCPH ATI 2080 / PTO 2185

Pollutant: Particulate Matter
Emission Limit(s): 24 tons/yr
Authority for Requirement: LCPH ATI 2080/ PTO 2185

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

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

Quarterly Reports
Quarterly reporting of process operating rates required for this source
Authority for Requirement: LCPH ATI 2080/ PTO 2185

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this

facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-029, SEP-038, SEP-039
Process Area: PELLET MILL

Table Pellet Mill-1. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-029	EU-29	Pellet Cooler Vent #1	Gluten Feed	26 ton/hr	CE-29A, CE-29B	Cyclone, Cyclone
SEP-038	EU-38	Pellet Cooler Vent #2	Gluten Feed	26 ton/hr	CE-38A, CE-38B	Cyclone, Cyclone
SEP-039	EU-39	Pellet Cooler Vent #3	Gluten Feed	36 ton/hr	CE-39A, CE-39B	Cyclone, Cyclone

Applicable Requirements

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

Table Pellet Mill-2. Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-029 SEP-038	EU-29, EU-38,	Opacity	20%	LCO 10.7
		PM/PM-10	19.1 lb/hr, 83.65 tpy	LCPH ATI 4452 / PTO 0 LCPH ATI 4453/ PTO 0
		PM	0.1 gr/dscf	LCPH ATI 4452/PTO 0 LCPH ATI 4453/ PTO 0 567 IAC 23.4(7) LCO 10.9(1)"g"
SEP-039	EU-39	Opacity PM	20% 0.1 gr/dscf	LCO 10.7 LCPH ATI 4454/ PTO 0 567 IAC 23.3(2)"a"(2) LCO 10.9(1)"g"

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

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

Authority for Requirement: LCPH ATI 4452 / PTO 0

LCPH ATI 4453 / PTO 0
LCPH ATI 4454 / PTO 0

Operating Limits:
Maximum capacity of the process unit shall be limited to 4687.5 bushels per hour. Authority for Requirement: LCPH ATI 4452 / PTO 0
LCPH ATI 4453 / PTO 0
LCPH ATI 4454 / PTO 0

Operating Condition Monitoring and Recordkeeping:
A log of operation shall be maintained for the operation of the above listed unit. The following information shall be recorded and kept on site for a period of no less than five years.
Weekly opacity observations when in use (non CFR reference Method 9)*
Records of all maintenance and repair completed on the control devices
*If visible emissions are observed, corrective actions shall take place within 8 hours of the observation or by the start of the next working day.
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

Authority for Requirement: LCPH ATI 4452 / PTO 0
LCPH ATI 4453 / PTO 0
LCPH ATI 4454 / PTO 0

<u>Emission Point Characteristics</u>
The emission point shall conform to the specifications listed below.

Table Pellet Mill-4. Emission Point Characteristics.

		Stack Characteristics				
EP	**LCPH ATI / PTO Numbers**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-029	4452 / 0	50	Vertical, unobstructed	34	105	24,724
SEP-038	4453 / 0	50	Vertical, unobstructed	34	105	24,724
SEP-039	4454 / 0	50	Vertical, unobstructed	34	105	24,724

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

<u>Monitoring Requirements</u>

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-036
Process Area: PELLET MILL

Associated Equipment
Associated Emission Unit ID Numbers: EU-36
Emissions Control Equipment ID Number: CE-36
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-36
Emission Unit Description: Pellet Mill Dust Collection
Raw Material/Fuel: Gluten Feed
Rated Capacity: 130 ton/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): 10%
Authority for Requirement: LCPH ATI 3566 / PTO 3520
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 1.26 lb/hr, 5.53 tpy
Authority for Requirement: LCPH ATI 3566 / PTO 3520

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

Table Pellet Mill-5. 1992 Corn Grind Expansion Emission Limits

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-036	EU-36	Opacity	See Plant Wide Conditions	See Plant Wide Conditions
		PM	See Plant Wide Conditions	See Plant Wide Conditions
		PM-10	See Plant Wide Conditions	See Plant Wide Condition
		NOx	See Plant Wide Conditions	See Plant Wide Conditions

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes and gauges needed to measure the parameters outlined in " Recordkeeping Requirements" shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 3566 / PTO 3520

Operating Limits:

Airflow to the baghouse shall be limited to 22,000 dscfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.
The process rate for the facility shall be limited to a weekly average of 450,000 bushels of corn per day.
Authority for Requirement: LCPH ATI 3566 / PTO 3520

Recordkeeping Requirements:

A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than three years, unless noted otherwise.
Weekly average of facility grind rate.
Daily pressure drop readings and/or visual check of stack discharge (kept for 6 months minimum)
Records of all maintenance and repair completed on the control devices.
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 3566 / PTO 3520

Reporting:

Submit a quarterly report summarizing the weekly average of facility grind rate by the 15th of each month for the previous quarter (January 15, April 15, July 15 and October 15).
Authority for Requirement: LCPH ATI 3566 / PTO 3520

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

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

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Alcohol Process Area:

NSPS:

Several pieces of equipment associated with this process group are subject to 40 CFR Part 60 Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. Excerpts of the applicable Subpart VV requirements can be found in Appendix D of this permit. (Note: Citation numbering is consistent with 40 CFR Part 60. Requirements to which ADM Corn Processing is not subject have been removed. These citations are provided for reference only. If the Subpart VV requirements are modified in the future, ADM Corn Processing is responsible for demonstrating compliance with 40 CFR 60 Subpart VV as printed in the Federal Register regardless of whether the citations listed below are modified.)

Authority for Requirement: LCO 10.9(2)(a)"40"
567 IAC 23.1(2)"n"
40 CFR Subpart VV

Several pieces of equipment associated with this process group are subject to 40 CFR Part 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) For Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Excerpts of the applicable Subpart Kb requirements can be found in Appendix B of this permit. (Note: Citation numbering is consistent with 40 CFR Part 60. Requirements to which ADM Corn Processing is not subject have been removed. These citations are provided for reference only. If the Subpart Kb requirements are modified in the future, ADM Corn Processing is responsible for demonstrating compliance with 40 CFR 60 Subpart Kb as printed in the Federal Register regardless of whether the citations listed below are modified.)

Authority for Requirement: LCO 10.9(2)(a)"56"
567 IAC 23.1(2)"ddd"
40 CFR Subpart Kb

NESHAP:

Several pieces of equipment associated with this process group are subject to 40 CFR Part 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing. Please refer to Appendix F for this Subpart.

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

Emission Point ID Number: SEP-055
Process Area: ALCOHOL

Associated Equipment
Associated Emission Unit ID Numbers: EU-55
Emissions Control Equipment ID Number: CE-55
Emissions Control Equipment Description: Wet Scrubber

Emission Units vented through this Emission Point: EU-55A, EU-55B, EU-55C, EU-55D
Emission Unit Description: Fermenter Vent / CO_2 Scrubber
Raw Material/Fuel: Carbon Dioxide (CO_2)
Rated Capacity: 100.4 ton/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: Volatile Organic Compounds (VOC)
Emission Limit(s): 95% Control or 20 ppmv, 72.4 lb/hr[1,2]
Authority for Requirement: LCPH ATI 4675 / PTO 5044

[1]All emission limitations (including operating parameter ranges and limits) apply at all times when process equipment is operating, except, in the case of process equipment or pollution control systems, during previously planned startup and shutdown periods (including planned maintenance periods), and malfunctions as defined in 40 CFR Part 63. These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these events, ADM shall minimize emissions to the extent practicable. To the extent practicable, startup and shutdown of pollution control systems will be performed during times when the process equipment is also shut down. Also, ADM shall to the extent practicable, control emissions during a malfunction event in a manner consistent with good air pollution control practice for minimizing emissions. ADM Consent Decree, Cedar Rapids Control Technology Plan Section 7.0, Footnote 1. Negotiated under United States v. ADM (C.D. IL, No. 03-CF-2066)
[2] The 95% confidence interval calculated from the three stack test runs was 73.1 pounds per hour.

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

Control Device:
A scrubber shall be installed to control VOC emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4675 / PTO 5044

Operating Limits:
This facility is limited to the following production amounts:
A maximum of 316.5 x 10^6 gallons of 200° alcohol per 12-month rolling period
A maximum of 82.4 x 10^6 gallons of 200° alcohol per calendar quarter
A maximum of 332.3 x 10^6 gallons of completely denatured alcohol per 12-month rolling period
A maximum of 86.5 x 10^6 gallons of completely denatured alcohol per calendar quarter
The water flow rate in the scrubber shall be greater than or equal to 130 gallons per minute.[3]
The pressure differential in the scrubber shall be greater than two (2) inches of water column and less than eighteen (18) inches of water column.
The scrubber on this unit shall be maintained according to the manufacturer's specifications and/or good operating practices.
[3] Minimum water flow recorded during the three test runs.
Authority for Requirement: LCPH ATI 4675 / PTO 5044

Operating Condition Monitoring and Recordkeeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Monitor and record the water flow rate in the scrubber on a daily basis
Monitor and record the pressure differential in the scrubber on a daily basis
Record the date, start and stop time when emissions from 190° and 200° are vented through EP 55 scrubber.
Record the amount of 200° alcohol and completed denatured alcohol produced. Calculate and record monthly, calendar quarter and 12-month rolling totals.
Authority for Requirement: LCPH ATI 4675 / PTO 5044

<u>Emission Point Characteristics</u>
The emission point shall conform to the specifications listed below.
Stack Height (ft, from ground): 86
Discharge Style: Vertical, unobstructed
Stack Opening (inches, diameter): 30
Exhaust Temperature (°F): 91
Exhaust Flowrate (acfm): 35,838
Authority for Requirement: LCPH ATI 4675 / PTO 5044

<u>Monitoring Requirements</u>
The owner/operator of this equipment shall comply with the monitoring requirements listed below.
Stack Testing:

Pollutant – Volatile Organic Compounds (VOC)
1st Stack Test to be Completed by – within three years of permit issuance date
Test Method –Method 25A (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Refer to Appendix I, Agency O&M Plans, for the complete agency operation and maintenance plans.

Emission Point ID Number: SEP-057, SEP-058, SEP-059, SEP-060
Process Area: ALCOHOL

Table Alcohol-1. Associated Equipment.

EP	EU	EU Description	Raw Material/Fuel	Rated Capacity	CE ID	CE Description
SEP-057	EU-57	Propagator Vent #1	Yeast Culture	2100 gal/hr	CE-57	Wet Scrubber
SEP-058	EU-58	Propagator Vent #2	Yeast Culture	2100 gal/hr	CE-58	Wet Scrubber
SEP-059	EU-59	Propagator Vent #3	Yeast Culture	2100 gal/hr	CE-59	Wet Scrubber
SEP-060	EU-60	Propagator Vent #4	Yeast Culture	2100 gal/hr	CE-60	Wet Scrubber

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 Alcohol-2. Emission Limits.

EP	EU	VOC	Permit #
SEP-057	EU-57	0.96 lb/hr, 4.2 tpy[1]	LCPH ATI 4676 / PTO 0
SEP-058	EU-58	0.96 lb/hr, 4.2 tpy[1]	LCPH ATI 4677 / PTO 0
SEP-059	EU-59	0.96 lb/hr, 4.2 tpy[1]	LCPH ATI 4678 / PTO 0
SEP-060	EU-60	0.96 lb/hr, 4.2 tpy[1]	LCPH ATI 4679 / PTO 0

[1]This emission limit is for the combined emissions from EP57 Yeast Propagator Tank1, EP58 Yeast Propagator Tank 2, EP59 Yeast Propagator Tank 3 and EP60 Yeast Propagator Tank 4.

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

Control Device:
A scrubber shall be installed to control VOC emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in Operating Condition Monitoring and Recordkeeping shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4676 / PTO 0
LCPH ATI 4677 / PTO 0
LCPH ATI 4678 / PTO 0
LCPH ATI 4679 / PTO 0

Operating Limits:

The owner or operator of this equipment shall comply with the operational limits and requirements listed below:
This facility is limited to the following production amounts:
A maximum of 316.5 x 10^6 gallons of 200° alcohol per 12-month rolling period
A maximum of 82.4 x 10^6 gallons of 200° alcohol per calendar quarter
A maximum of 332.3 x 10^6 gallons of completely denatured alcohol per 12-month rolling period
A maximum of 86.5 x 10^6 gallons of completely denatured alcohol per calendar quarter
The water flow rate in the scrubber shall be no less than 5% below the minimum water flow rate recorded during a successful compliance test for VOC emissions.
The scrubber on this unit shall be maintained according to the manufacturer's specifications and/or good operating practices.
Authority for Requirement: LCPH ATI 4676 / PTO 0
LCPH ATI 4677 / PTO 0
LCPH ATI 4678 / PTO 0
LCPH ATI 4679 / PTO 0

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

Monitor and record the water flow rate in the scrubber on a daily basis.
Record the amount of 200° alcohol and completely denatured alcohol produced. Calculate and record monthly, calendar quarter and 12-month rolling totals.
Authority for Requirement: LCPH ATI 4676 / PTO 0
LCPH ATI 4677 / PTO 0
LCPH ATI 4678 / PTO 0
LCPH ATI 4679 / PTO 0

<u>Emission Point Characteristics</u>

The emission points shall conform to the specifications listed below.

Table Alcohol-3. Stack Characteristics.

			Stack Characteristics				
EP	**EU**	**ATI / PTO Numbers**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-057	EU-57	4676 / 0	52	Vertical, unobstructed	6	67	54
SEP-058	EU-58	4677 / 0	52	Vertical, unobstructed	6	67	54
SEP-059	EU-59	4678 / 0	52	Vertical, unobstructed	6	67	54
SEP-060	EU-60	4679 / 0	52	Vertical, unobstructed	6	67	54

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

Monitoring Requirements

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

Stack Testing:

Pollutant – Volatile Organic Compounds (VOC)
1st Stack Test to be Completed by – within 60 days after achieving maximum production rate and no later than one hundred eighty days after the initial startup date of the proposed equipment[2]
Test Method – 40 CFR 60, Appendix A, Method 25A
Authority for Requirement – LCPH ATI 4676 / PTO 0
LCPH ATI 4677 / PTO 0
LCPH ATI 4678 / PTO 0
LCPH ATI 4679 / PTO 0

[2]ADM shall conduct source tests on any 2 of the 4 yeast propagators (EP57 – EP60).

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-069
Process Area: ALCOHOL

Associated Equipment
Associated Emission Unit ID Numbers: EU-69
Emissions Control Equipment ID Number: CE-69
Emissions Control Equipment Description: 190 Product Scrubbing System

---

Emission Unit vented through this Emission Point: EU-69
Emission Unit Description: 190 Product Scrubbing System
Raw Material/Fuel: Ethanol, 190 Proof
Rated Capacity: 36,130.14 gal/hr

Applicable Requirements

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

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.3 lb/hr, 1.31 tpy
Authority for Requirement: LCPH ATI 4682 / PTO 0

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 2.0 lb/hr, 8.76 tpy
Authority for Requirement: LCPH ATI 4682 / PTO 0

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

Control Device:
A wet scrubber shall be installed to control VOC and SO_2 emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4682 / PTO 0

Operating Limits:
This facility is limited to the following production amounts:
A maximum of 316.5 x 10^6 gallons of 200° alcohol per 12-month rolling period
A maximum of 82.4 x 10^6 gallons of 200° alcohol per calendar quarter
A maximum of 332.3 x 10^6 gallons of completely denatured alcohol per 12-month rolling period
A maximum of 86.5 x 10^6 gallons of completely denatured alcohol per calendar quarter
The fresh water flow rate in the scrubber shall be no less than 5% below the minimum water flow rate recorded during a successful compliance test for VOC emissions.
The pH of the scrubber liquid shall be no less than 5% below the minimum pH recorded during a successful compliance test for SO_2 emissions.
The scrubber on this unit shall be maintained according to the manufacturer's specifications and/or good operating practices.
Authority for Requirement: LCPH ATI 4682 / PTO 0

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

Monitor and record the water flow rate in the scrubber on a daily basis.
Monitoring and recording the pH of the scrubber water is not required during periods when the control system uses fresh once-pass water provided by the municipal water supply system.
Monitor and record the pH of the scrubber water on a daily basis during periods when the control system uses recycled water or water from a non-municipal water supply system.
Record the amount of 200° alcohol and completely denatured alcohol produced. Calculate and record monthly, calendar quarter and 12-month rolling totals.
Authority for Requirement: LCPH ATI 4682 / PTO 0

<u>Emission Point Characteristics</u>
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 115
Discharge Style: Vertical, with spark arrestor
Stack Opening, (inches, diameter): 8
Exhaust Temperature (°F): 69
Exhaust Flow Rate (scfm): 336
Authority for Requirement: LCPH ATI 4682 / PTO 0
The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack Testing:

Testing was completed on this source on November 13, 2007 using fresh once-pass water from a municipal water supply. If ADM uses recycled water or water from a non-municipal water supply in the scrubber, than source testing for SO2 and VOC shall be conducted when the scrubber uses recycled water and/or water from a non-municipal water supply.
Authority for Requirement: LCPH ATI 4682 / PTO 0

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: SEP-070
Process Area: ALCOHOL

Associated Equipment
Associated Emission Unit ID Numbers: EU-70
Emissions Control Equipment ID Number: CE-70
Emissions Control Equipment Description: 200 Product Scrubbing System

---

Emission Unit vented through this Emission Point: EU-70
Emission Unit Description: 200 Product Scrubbing System
Raw Material/Fuel: Ethanol, 200 Proof
Rated Capacity: 36,130.14 gal/hr

Applicable Requirements

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

Pollutant: Volatile Organic Compounds (VOC)[1]
Emission Limit(s): 1.05 lb/hr
Authority for Requirement: LCPH ATI 4683 / PTO 5265
[1]Pursuant to Paragraph 39(b) as negotiated under United States v. ADM (C.D. IL, No. 03-CV-2066)

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

Control Device:
A wet scrubber shall be installed to control VOC emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4683 / PTO 5265

Operating Limits:
This facility is limited to the following production amounts:
A maximum of 316.5 x 10^6 gallons of 200° alcohol per 12-month rolling period
A maximum of 82.4 x 10^6 gallons of 200° alcohol per calendar quarter
A maximum of 332.3 x 10^6 gallons of completely denatured alcohol per 12-month rolling period
A maximum of 86.5 x 10^6 gallons of completely denatured alcohol per calendar quarter
The fresh water flow rate in the scrubber shall be no less than 19 gallons per minute.

The scrubber on this unit shall be maintained according to the manufacturer's specifications and/or good operating practices.
Authority for Requirement: LCPH ATI 4683 / PTO 5265

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

Monitor and record the water flow rate in the scrubber on a daily basis.
Monitoring and recording the pH of the scrubber water is not required during periods when the control system uses fresh once-pass water provided by the municipal water supply system.
Monitor and record the pH of the scrubber water on a daily basis during periods when the control system uses recycled water or water from a non-municipal water supply system.
Record the amount of 200° alcohol and completely denatured alcohol produced. Calculate and record monthly, calendar quarter and 12-month rolling totals.
Authority for Requirement: LCPH ATI 4683 / PTO 5265

Emission Point Characteristics
The emission point shall conform to the specifications listed below.
Stack Height, (ft, from the ground): 96
Discharge Style: Vertical, with spark arrestor
Stack Opening, (inches, diameter): 8
Exhaust Temperature (°F): 60
Exhaust Flow Rate (acfm): 392
Authority for Requirement: LCPH ATI 4683 / PTO 5265
The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Pollutant – Volatile Organic Compounds (VOC)[1]
1st Stack Test to be Completed by – within 60 days after achieving maximum production rate and no later than one hundred eighty days after the initial startup date of the proposed equipment
Test Method – 40 CFR 60, Appendix A, Method 25A
Authority for Requirement – LCPH ATI 4683 / PTO 5265

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)

[1] Testing was initially completed on this source on November 14, 2007 using fresh once-pass water from a municipal water supply. If ADM uses recycled water or water from a non-municipal water supply in the scrubber, than source testing for the pollutants listed above shall be conducted when the scrubber uses recycled water and/or water from a non-municipal water supply.

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: SEP-071, SEP-072, SEP-075, SEP-077, SEP-080, SEP-081, SEP-082

Process Area: ALCOHOL

Table Alcohol-4. Associated Equipment.

EP	EU	EU Description	Raw Material / Fuel	Rated Capacity	CE ID	CE Description
SEP-071	EU-71	#1 Alcohol Storage Tank Vent	CDA	500,000 gallons	CE-71	Internal Floating Roof
SEP-072	EU-72	#2 Alcohol Storage Tank Vent	CDA	500,000 gallons	CE-72	Internal Floating Roof
SEP-075	EU-75	#2 Hi-Wine Process Tank Vent	Ethanol, 200 Proof	200,000 gallons	CE-75	Internal Floating Roof
SEP-077	EU-77	Corrosion Inhibitor Tank Vent	Corrosion Inhibitor	8761 gallons	None	None
SEP-080	EU-80	#3 Hi-Wine Process Tank Vent	Ethanol, 200 Proof	200,000 gallons	CE-80	Internal Floating Roof
SEP-081	EU-81	Fusel Oil Tank Vent	Fusel Oil	16,920 gallons	None	None
SEP-082	EU-82	#1 190 Proof Storage Tank Vent	Ethanol, 190 Proof	154,224 gallons	None	None

Applicable Requirements

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

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

Table Alcohol-5. Emission Limits.

EP	EU	VOC	LCPH Permit #
SEP-071	EU-71	None	ATI 4684 / PTO 5295
SEP-072	EU-72	None	ATI 4685 / PTO 5296
SEP-075	EU-75	None	ATI 4688 / PTO 5299
SEP-077	EU-77	None	ATI 4690 / PTO 5300
SEP-080	EU-80	None	ATI 4691 / PTO 5301
SEP-081	EU-81	None	ATI 4692 / PTO 5302
SEP-082	EU-82	None	ATI 4693 / PTO 5303

Operational Limits & Requirements

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

Control Device:

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

Authority for Requirement: LCPH ATI 4684 / PTO 5295
LCPH ATI 4685 / PTO 5296
LCPH ATI 4688 / PTO 5299
LCPH ATI 4691/ PTO 5301

NSPS and NESHAP Applicability:

This unit is subject to NSPS Subpart A, General Provisions, and Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing. This unit is not subject to NESHAP requirements at this time.

Authority for Requirement: LCPH ATI 4684 / PTO 5295
LCPH ATI 4685 / PTO 5296
LCPH ATI 4688 / PTO 5299
LCPH ATI 4690 / PTO 5300
LCPH ATI 4691 / PTO 5301
LCPH ATI 4692 / PTO 5302
LCPH ATI 4693 / PTO 5303
LCO 10.9(2)(a)"40"
567 IAC 23.1(2)"n"
40 CFR 60 Subpart VV

Operating Limits:

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

B) This facility is limited to the following production amounts:

A maximum of 316.5 x 10^6 gallons of 200° alcohol per 12-month rolling period
A maximum of 82.4 x 10^6 gallons of 200° alcohol per calendar quarter
A maximum of 332.3 x 10^6 gallons of completely denatured alcohol per 12-month rolling period
A maximum of 86.5 x 10^6 gallons of completely denatured alcohol per calendar quarter

Authority for Requirement: LCPH ATI 4684 / PTO 5295
LCPH ATI 4685 / PTO 5296
LCPH ATI 4688 / PTO 5299
LCPH ATI 4690 / PTO 5300
LCPH ATI 4691 / PTO 5301
LCPH ATI 4692 / PTO 5302
LCPH ATI 4693 / PTO 5303

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Recordkeeping for NSPS Subpart VV shall be done according to 40 CFR 60.486.
Reporting for NSPS Subpart VV shall be done according to 40 CFR 60.487.
Record the amount of 200° alcohol and completely denatured alcohol produced. Calculate and record monthly, calendar quarter and 12-month rolling totals.

Authority for Requirement: LCPH ATI 4684 / PTO 5295
LCPH ATI 4685 / PTO 5296
LCPH ATI 4688 / PTO 5299
LCPH ATI 4690 / PTO 5300
LCPH ATI 4691 / PTO 5301
LCPH ATI 4692 / PTO 5302
LCPH ATI 4693 / PTO 5303
LCO 10.9(2)(a)"40"
567 IAC 23.1(2)"n"
40 CFR 60 Subpart VV

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Table Alcohol-7. Stack Characteristics.

			Stack Characteristics				
EP	**EU**	**ATI / PTO #**	**Stack Height (ft, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-071	EU-71	4684 / 5295	42	Horizontal	4 vents at 24" x 10"	80	Passive displacement
SEP-072	EU-72	4685 / 5296	42	Horizontal	4 vents at 24" x 10"	80	Passive displacement
SEP-075	EU-75	4688 / 5299	32	Horizontal	3 vents at 24" x 10"	89	Passive displacement
SEP-077	EU-77	4690 / 4300	17	Vertical w/ obstructing rain cap	3	Ambient	Passive displacement
SEP-080	EU-80	4691 / 5301	17	Vertical w/ obstructing rain cap	3 vents at 24" x 10"	70	Passive displacement
SEP-081	EU-81	4692 / 5302	17	Vertical w/ obstructing rain cap	4	Ambient	Passive displacement
SEP-082	EU-82	4693 / 5303	44	Vertical w/ obstructing rain cap	4	89	Passive displacement

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate

may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-073, SEP-074
Process Area: ALCOHOL

Table Alcohol-8. Associated Equipment.

EP	EU	EU Description	Raw Material / Fuel	Rated Capacity	CE ID	CE Description
SEP-073	EU-73	#3 Alcohol Storage Tank Vent	CDA	1,000,000 gallons	CE-73	Internal Floating Roof
SEP-074	EU-74	Denaturant Storage Tank Vent	Denaturant	200,000 gallons	CE-74	Internal Floating Roof

Applicable Requirements

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

Table Alcohol-9. Emission Limits.

EP	EU	VOC	LCPH Permit #
SEP-073	EU-73	None	ATI 4686 / PTO 5297
SEP-074	EU-74	0.27 lb/hr, 1.19 tpy	ATI 4687 / PTO 5298

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

Control Device:
An internal floating roof shall be installed to control VOC emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4686 / PTO 5297
LCPH ATI 4687 / PTO 5298

NSPS and NESHAP Applicability:
This unit is subject to NSPS Subpart A, General Provisions, and Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing.
This unit is subject to NSPS Subpart A, General Provisions, and Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which construction, reconstruction or modification commenced after July 23, 1984.
This unit is not subject to NESHAP requirements at this time.

Authority for Requirement:

LCPH ATI 4686 / PTO 5297
LCPH ATI 4687 / PTO 5298
LCO 10.9(2)(a)"40"
LCO 10.9(2)(a)"56"
567 IAC 23.1(2)"n"
567 IAC 23.1(2)"ddd"
40 CFR 60 Subpart VV
40 CFR 60 Subpart Kb

Operating Limits:

This facility shall comply with the requirements of NSPS Subpart VV by meeting the standards of 40 CFR 60.482-1 through 40 CFR 60.485.
This facility is limited to the following production amounts:
A maximum of 316.5 x 10^6 gallons of 200° alcohol per 12-month rolling period
A maximum of 82.4 x 10^6 gallons of 200° alcohol per calendar quarter
A maximum of 332.3 x 10^6 gallons of completely denatured alcohol per 12-month rolling period
A maximum of 86.5 x 10^6 gallons of completely denatured alcohol per calendar quarter
This facility shall comply with the requirements of NSPS Subpart Kb by meeting the standards of 40 CFR 60.112b and the testing and procedures of 40 CFR 60.113b.
Authority for Requirement:

LCPH ATI 4686 / PTO 0
LCPH ATI 4687 / PTO 0
LCO 10.9(2)(a)"40"
LCO 10.9(2)(a)"56"
567 IAC 23.1(2)"n"
567 IAC 23.1(2)"ddd"
40 CFR 60 Subpart VV
40 CFR 60 Subpart Kb

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Recordkeeping for NSPS Subpart VV shall be done according to 40 CFR 60.486.
Reporting for NSPS Subpart VV shall be done according to 40 CFR 60.487.
Recordkeeping for NSPS Subpart Kb shall be done according to 40 CFR 60.115b and 40 CFR 60.116b.
Reporting for NSPS Subpart Kb shall de done according to 40 CFR 60.115b.
Record the amount of 200° alcohol and completely denatured alcohol produced. Calculate and record monthly, calendar quarter and 12-month rolling totals.

Authority for Requirement: LCPH ATI 4686 / PTO 5297
LCPH ATI 4687 / PTO 5298
LCO 10.9(2)(a)"40"
LCO 10.9(2)(a)"56"
567 IAC 23.1(2)"n"

567 IAC 23.1(2)"ddd"
40 CFR 60 Subpart Kb
40 CFR 60 Subpart VV

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

Table Alcohol-10. Stack Characteristics

			Stack Characteristics				
EP	**EU**	**ATI / PTO #**	**Stack Height (ft, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-073	EU-73	4686 / 5297	48	Horizontal	6 vents at 24" x 10"	80	Passive displacement
SEP-074	EU-74	4687 / 5298	32	Horizontal	3 vents at 24" x 10"	Ambient	Passive displacement

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

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

Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-076
Process Area: ALCOHOL LOADOUT

Associated Equipment
Associated Emission Unit ID Numbers: EU-76
Emissions Control Equipment ID Number: CE-76
Emissions Control Equipment Description: Flare

Emission Unit vented through this Emission Point: EU-76
Emission Unit Description: Alcohol Loadout
Raw Material/Fuel: Completely Denatured Alcohol
Rated Capacity: 270,000 gal/hr

Applicable Requirements

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

Pollutant: Opacity[2]
Emission Limit(s): 20%
Authority for Requirement: LCPH ATI 4689 / PTO 5017

Pollutant: Opacity[2]
Emission Limit(s): 40%
Authority for Requirement: Iowa DNR PSD Permit 04-A-314P

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: LCPH ATI 4689 / PTO 5017
Iowa DNR PSD Permit 04-A-314P
567 IAC 23.3(2)"a"(2)
LCO 10.9(1)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.02 lb/hr, 0.09 tpy
Authority for Requirement: LCPH ATI 4689 / PTO 5017
Iowa DNR PSD Permit 04-A-314P

Pollutant: Sulfur Dioxide (SO_2)

Emission Limit(s): 500 ppmv
Authority for Requirement: LCPH ATI 4689 / PTO 5017
Iowa DNR PSD Permit 04-A-314P
567 IAC 23.3(3)"e"
LCO 10.12(2)

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 0.15 lb/MMBtu, 4.05 lb/hr, 3.94 tpy
Authority for Requirement: LCPH ATI 4689 / PTO 5017
Iowa DNR PSD Permit 04-A-314P

Pollutant: Volatile Organic Compounds (VOC)[1]
Emission Limit(s): 95% reduction, 4.82 lb/hr, 12.2 tpy
Authority for Requirement: LCPH ATI 4689 / PTO 5017
Iowa DNR PSD Permit 04-A-314P

[1] All emission limitations (including operating parameter ranges and limits) apply at all times when then process equipment is operating, except, in the case of process equipment or pollution control systems, during previously planned startup and shutdown periods (including planned maintenance periods), and malfunctions as defined in 40 CFR Part 63. These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these events, ADM shall minimize emissions to the extent practicable. To the extent practicable, startup and shutdown of pollution control systems will be performed during times when the process equipment is also shut down. Also, ADM shall to the extent practicable, control emissions during a malfunction event in a manner consistent with good air pollution control practice for minimizing emissions. ADM Consent Decree, Cedar Rapids Control Technology Plan Section 7.0, Footnote 1. Negotiated under United States v. ADM (C.D. IL, No. 03-CF-2066)
[2] 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 or Linn County may require additional proof to demonstration compliance (e.g., stack testing).

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

Control Device:
A flare shall be used to control VOC emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4689 / PTO 5017

NSPS and NESHAP Applicability:

This unit is subject to NSPS Subpart A, General Provisions, and Subpart VV, Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing.
This unit is not subject to NESHAP requirements at this time.

Authority for Requirement: LCPH ATI 4689 / PTO 5017
Iowa DNR PSD Permit 04-A-314P
LCO 10.9(2)(a) "40"
567 IAC 23.1(2) "n"
40 CFR 60 Subpart VV

Operating Limits:

The owner or operator of this equipment shall comply with the operational limits and requirements listed below:
This facility shall comply with the requirements of NSPS Subpart VV by meeting the standards of 40 CFR 60.482-1 through 40 CFR 60.485.
This facility is limited to the following production amounts:
A maximum of 316.5 x 10^6 gallons of 200° alcohol per 12-month rolling period
A maximum of 82.4 x 10^6 gallons of 200° alcohol per calendar quarter
A maximum of 332.3 x 10^6 gallons of completely denatured alcohol per 12-month rolling period
A maximum of 86.5 x 10^6 gallons of completely denatured alcohol per calendar quarter
This flare shall be designed an operated to achieve a minimum of 95% reduction of VOC emissions from the rail and truck loadout operations.
This flare shall use only natural gas or propane as the auxiliary fuel.

Authority for Requirement: LCPH ATI 4689 / PTO 5017
Iowa DNR PSD Permit 04-A-314P
LCO 10.9(2)(a) "40"
567 IAC 23.1(2) "n"
40 CFR 60 Subpart VV

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Recordkeeping for NSPS Subpart VV shall be done according to 40 CFR 60.486.
Reporting for NSPS Subpart VV shall be done according to 40 CFR 60.487.
The loadout flare shall be monitored continuously for the presence of the pilot flame. Loadout operations shall be discontinued any time the pilot flame is out.
Record the amount of 200° alcohol and completely denatured alcohol produced. Calculate and record monthly, calendar quarter and 12-month rolling totals.
Record the amount of natural gas and propane used in this flare. Calculate and record monthly and 12-month rolling totals.

Authority for Requirement: LCPH ATI 4689 / PTO 5017
Iowa DNR PSD Permit 04-A-314P
LCO 10.9(2)(a) "40"
567 IAC 23.1(2) "n"
40 CFR 60 Subpart VV

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

Stack Height, (ft, from the ground): 40
Discharge Style: Vertical, unobstructed
Stack Opening, (inches, diameter): 72
Exhaust Temperature (°F): 1400
Exhaust Flow Rate (acfm): 61,000
Authority for Requirement: LCPH ATI 4689 / PTO 5017
Iowa DNR PSD Permit 04-A-314P

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

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

Stack testing is not required at this time.

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-067, SEP-068

Process Area: CO_2

Table CO_2-1. Associated Equipment.

EP	EU	EU Description	Raw Material/Fuel	Rated Capacity
SEP-067	EU-67	Ethanol – CO_2 Carbon Column Regeneration Vent	Carbon Dioxide (CO_2)	16.67 ton/hr
SEP-068	EU-68	Ethanol – CO_2 Dryer Column Regeneration Vent	Carbon Dioxide (CO_2)	16.67 ton/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.

VOC emissions from EP67 CO_2 Carbon Column Regeneration Vent and EP68 Carbon Dryer Regeneration Vent have been accounted for in EP55 Ethanol Fermentors / CO_2 Scrubber.
Authority for Requirement: LCPH ATI 4680 / PTO 5228
LCPH ATI 4681 / PTO 5229

Operational Limits & Requirements

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

Operating Limits:

This facility is limited to the following production amounts:
A maximum of 316.5 x 10^6 gallons of 200° alcohol per 12-month rolling period.
A maximum of 82.4 x 10^6 gallons of 200° alcohol per calendar quarter.
A maximum of 332.3 x 10^6 gallons of completely denatured alcohol per 12-month rolling period.
A maximum of 86.5 x 10^6 gallons of completely denatured alcohol per calendar quarter.
Authority for Requirement: LCPH ATI 4680 / PTO 5228
LCPH ATI 4681 / PTO 5229

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Record the amount of 200° alcohol and completed denatured alcohol produced. Calculate and record monthly, calendar quarter and 12-month rolling totals.
Authority for Requirement: LCPH ATI 4680 / PTO 5228
LCPH ATI 4681 / PTO 5229

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

Table CO_2-2. Stack Characteristics.

			Stack Characteristics			
EP	**EU**	**LCPH Permit Numbers**	**Stack Height (feet, above ground)**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (acfm)**
SEP-067	EU-67	4680 / 5228	65	6, Horizontal	212	1707
SEP-068	EU-68	4681 / 5229	68	3, Vertical, unobstructed	100	414

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

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

Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-002
Process Area: STARCH

Associated Equipment
Associated Emission Unit ID Numbers: EU-2A, EU-2B
Emissions Control Equipment ID Number: CE-2A, CE-2B
Emissions Control Equipment Description: Multivane Scrubber, Multivane Scrubber

---

Emission Unit vented through this Emission Point: EU-2A
Emission Unit Description: Starch Drying – Spray Dryer
Raw Material/Fuel: Starch Slurry
Rated Capacity: 50,000 lb/hr

Emission Unit vented through this Emission Point: EU-2B
Emission Unit Description: Natural Gas Fired Process Heater
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.05 MMCF/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): 10%
Authority for Requirement: LCPH ATI 3446 / PTO 3497

Pollutant: PM-10
Emission Limit(s): 2.0 lb/hr, 8.9 tpy
Authority for Requirement: LCPH ATI 3446 / PTO 3497

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1) "g"

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

Operational Limits & Requirements

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

Control Device:

Two wet scrubbers operating in parallel shall be used to control particulate emissions. The control device shall be operated at all times when any equipment controlled by the control device is operating. The control device shall be maintained on this source in a good operating condition at all times.

All appropriate probes and gauges needed to measure the parameters outlined in "Compliance Testing and Monitoring" shall be installed and maintained in a good operating condition.

Authority for Requirement: LCPH ATI 3446 / PTO 3497

Operating Limits:

This unit is not conditioned to anything less than the maximum operating capacity of the device.

Dryer Design Rate: 50,000 lb/hr corn starch

Dryer Design Rate: 50 MMBtu/hr

Maximum Exhaust Airflow Rate: 125,000 dscfm

The water flow rate to the scrubbers shall be maintained at a minimum of 165 gallons per minute.

The dryer shall be limited to the production of common starch only and shall not be used for the production of modified starch.

The dryer shall burn only natural gas.

Authority for Requirement: LCPH ATI 3446 / PTO 3497

Compliance Testing and Monitoring Requirements:

The following information shall be monitored:

Monthly process rate for dryer

Monthly natural gas consumption

Daily pressure drop

Daily scrubber water flow rate

All monitors shall be easily accessible to air pollution personnel.

Authority for Requirement: LCPH ATI 3446 / PTO 3497

Recordkeeping Requirements:

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

Monthly process rate for dryer

Monthly natural gas consumption

Daily pressure drop readings

Daily scrubber water flow rate readings

Any changes in operation that would affect emissions, including changes in fan speed

Records of all maintenance and repair completed on the control device

Copies of test results shall be retained until a new approved representative test is conducted or for five years, whichever is longer

These records shall be available on site at all times for viewing by air pollution control personnel.

Authority for Requirement: LCPH ATI 3446 / PTO 3497

Reporting:

Submit quarterly emissions report summarizing the following items by the 15th of each month for the previous quarter.

Monthly average drying rate

Monthly natural gas consumption

Authority for Requirement: LCPH ATI 3446 / PTO 3497

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by - within first year of permit term
2nd Stack Test to be Completed by – between 2.5 – 3.5 years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

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

Opacity Monitoring:

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Refer to Appendix I, Agency O&M Plans, for the complete agency operation and maintenance plan.

Emission Point ID Number: SEP-003, SEP-004
Process Area: STARCH

Table Starch-1. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-003	EU-3	Starch Loadout	Dry Starch	180,000 lb/hr	CE-3	Dust Collector
SEP-004	EU-4	Starch Loadout	Dry Starch	180,000 lb/hr	CE-4	Dust Collector

Applicable Requirements

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

Table Starch-2. Emission Limits.

EP	EU	Opacity	PM-10	ATI / PTO #
SEP-003	EU-3	20%	0.1 lb/hr, 0.44 tpy	3557 / 3498
SEP-004	EU-4	20%	0.1 lb/hr, 0.44 tpy	3558 / 3499

Table Starch-3. General Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-003 SEP-004	EU-3 EU-4	Opacity	20%	LCO 10.7
		PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

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

Control Device:
A dust collector shall be used to control particulate emissions. The control device shall be operated at all times when any equipment controlled by the control device is operating. The control device shall be maintained on this source in good operating condition at all times.
All appropriate probes and gauges needed to measure the parameters for compliance testing shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 3557 / PTO 3498
LCPH ATI 3558 / PTO 3499

Operating Limits:
This unit is not conditioned to anything less than the maximum operating capacity of the device.
Loadout rate: 180,000 lb/hr
Maximum exhaust airflow rate: 1579 scfm (1640 acfm)
Note: This source exhausts into an enclosed structure eliminating any potential uncontrolled release to the atmosphere.
Authority for Requirement: LCPH ATI 3557 / PTO 3498
LCPH ATI 3558 / PTO 3499

Recordkeeping Requirements:
A log of operation shall be maintained for the above listed unit. The following information shall be recorded and kept on site for a period of no less than five years.
Any changes in operation that would affect emissions, including changes in fan speed
Records of all maintenance and repair completed on the control device
Copies of test results shall be retained until a new approved representative test is conducted or for five years, whichever is longer.
These records shall be available on site at all times for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 3557 / PTO 3498
LCPH ATI 3558 / PTO 3499

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-007
Process Area: STARCH

Associated Equipment
Associated Emission Unit ID Numbers: EU-7
Emissions Control Equipment ID Number: CE-7
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-7
Emission Unit Description: Starch Transfer and Loadout
Raw Material/Fuel: Dry Starch
Rated Capacity: 50,000 lb/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCPH ATI 3559 / PTO 3500
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.27 lb/hr, 1.18 tpy
Authority for Requirement: LCPH ATI 3559 / PTO 3500

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

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

Control Device:
A baghouse shall be used to control particulate emissions. The control device shall be operated at all times when any equipment controlled by the control device is operating. The control device shall be maintained on this source in a good operating condition at all times.
All appropriate probes and gauges needed to measure the parameters for compliance testing shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 3559 / PTO 3500
Operating Limits:

This unit is not conditioned to anything less than the maximum capacity of the device.
Loadout rate: 50,000 lb/hr
Maximum exhaust airflow rate: 2000 scfm
Authority for Requirement: LCPH ATI 3559 / PTO 3500

Compliance Testing and Monitoring Requirements:
The following information shall be monitored:
Daily pressure drop readings when operating
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 3559 / PTO 3500

Recordkeeping Requirements:
A log of operation shall be maintained for the above listed unit. The following information shall be recorded and kept on site for a period of not less than five years.
Daily pressure drop readings
Any changes in operation that would affect emissions, including changes in fan speed
Records of all maintenance and repair completed on the control device
Copies of test results shall be retained until a new approved representative test is conducted or for five years, whichever is longer.
These records shall be available on site at all times for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 3559 / PTO 3500

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-120, SEP-123, SEP-126, SEP-127, SEP-128, SEP-130

Process Area: MALTODEXTRIN

Table Maltodextrin-1. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-120	EU-120	Maltodextrin Storage Bin #6	Maltodextrin	5 ton/hr	CE-120	Baghouse
SEP-123	EU-123	Maltodextrin Storage Bin #5	Maltodextrin	5 ton/hr	CE-123	Baghouse
SEP-126	EU-126	Maltodextrin Storage Bin #4	Maltodextrin	5 ton/hr	CE-126	Baghouse
SEP-127	EU-127	Maltodextrin Storage Bin #3	Maltodextrin	5 ton/hr	CE-127	Baghouse
SEP-128	EU-128	Maltodextrin Storage Bin #2	Maltodextrin	5 ton/hr	CE-128	Baghouse
SEP-130	EU-130	Maltodextrin Storage Bin #1	Maltodextrin	5 ton/hr	CE-130	Baghouse

Applicable Requirements

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

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

Table Maltodextrin-2. Emission Limits.

EP	EU	Opacity	PM / PM-10	Permit #
SEP-120	EU-120	20%	0.015 gr/scf, 0.10 lb/hr	ATI 4513 / PTO 5076
SEP-123	EU-123	20%	0.015 gr/scf, 0.10 lb/hr	ATI 4514 / PTO 5077
SEP-126	EU-126	20%	0.015 gr/scf, 0.10 lb/hr	ATI 4515 / PTO 5078
SEP-127	EU-127	20%	0.015 gr/scf, 0.10 lb/hr	ATI 4516 / PTO 5079
SEP-128	EU-128	20%	0.015 gr/scf, 0.10 lb/hr	ATI 4517 / PTO 5080
SEP-130	EU-130	20%	0.015 gr/scf, 0.10 lb/hr	ATI 4518 / PTO 5081

Table Maltodextrin-3. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-120	EU-120	Opacity	20%	LCO 10.7
SEP-123 SEP-126 SEP-127 SEP-128 SEP-130	EU-123 EU-126 EU-127 EU-128 EU-130	PM	0.1 gr/dscf	567 IAC 23.4(7) LCO 10.9(1)"g"

Operational Limits & Requirements

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

Control Device:
A baghouse shall be used to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4513 / PTO 5076
LCPH ATI 4514 / PTO 5077
LCPH ATI 4515 / PTO 5078
LCPH ATI 4516 / PTO 5079
LCPH ATI 4517 / PTO 5080
LCPH ATI 4518 / PTO 5081

Operating Limits:
All six bins combined (SEP-120, SEP-123, SEP-126, SEP-127, SEP-128, SEP-130) shall not operate more than 8760 hours per year based on a 12-month rolling total.
Authority for Requirement: LCPH ATI 4513 / PTO 5076
LCPH ATI 4514 / PTO 5077
LCPH ATI 4515 / PTO 5078
LCPH ATI 4516 / PTO 5079
LCPH ATI 4517 / PTO 5080
LCPH ATI 4518 / PTO 5081

Operating Condition Monitoring and Recordkeeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County AQD and other federal or state air pollution regulatory agencies and/or their authorized representatives. Records shall be legible and maintained in an orderly manner. All monitors shall be easily accessible to air pollution personnel. These records shall show the following:
Non-resettable hour meters shall be installed on each bin.
During the first twelve (12) months of operation, determine the cumulative hours of operation for each bin for each month of operation.
After the first twelve (12) months of operation, determine the annual hours of operation on a rolling 12-month basis for each month of operation.
Daily pressure drop readings
Records of all maintenance and repair complete on the control equipment.
Copies of test results shall be retained until a new approved representative test is conducted or for 5 years, whichever is longer.
Authority for Requirement: LCPH ATI 4513 / PTO 5076
LCPH ATI 4514 / PTO 5077
LCPH ATI 4515 / PTO 5078
LCPH ATI 4516 / PTO 5079
LCPH ATI 4517 / PTO 5080
LCPH ATI 4518 / PTO 5081

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

Table Maltodextrin-4. Stack Characteristics.

			Stack Characteristics				
EP	**EU**	**LCPH ATI / PTO Numbers**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-120	EU-120	4513 / 5076	64	Downward	6	130-165	800
SEP-123	EU-123	4514 / 5077	64	Downward	6	130-165	800
SEP-126	EU-126	4515 / 5078	64	Downward	6	130-165	800
SEP-127	EU-127	4516 / 5079	64	Downward	6	130-165	800
SEP-128	EU-128	4517 / 5080	64	Downward	6	130-165	800
SEP-130	EU-130	4518 / 5081	64	Downward	6	130-165	800

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

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

Stack testing for PM/PM10 was successfully completed for emission point SEP-127 on February 4-5, 2005.

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

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

Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-122
Process Area: MALTODEXTRIN

Associated Equipment
Associated Emission Unit ID Numbers: EU-122A, EU-122B
Emissions Control Equipment ID Number: CE-122A, CE-122B
Emissions Control Equipment Description: Baghouse, Baghouse

Emission Unit vented through this Emission Point: EU-122A
Emission Unit Description: Maltodextrin Spray Dryer
Raw Material/Fuel: Maltodextrin
Rated Capacity: 10,000 lb/hr

Emission Unit vented through this Emission Point: EU-122B
Emission Unit Description: Maltodextrin - Drying Natural Gas Combustion
Raw Material/Fuel: Natural Gas
Rated Capacity: 0.04 MMCF/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): 20%
Authority for Requirement: LCPH ATI 4520 / PTO 0
LCO 10.7

Pollutant: PM-10[1]
Emission Limit(s): 0.0037 gr/scf, 2.06 lb/hr
Authority for Requirement: LCPH ATI 4520 / PTO 0

Pollutant: Particulate Matter[1]
Emission Limit(s): 0.0037 gr/scf, 2.06 lb/hr
Authority for Requirement: LCPH ATI 4520 / PTO 0

[1]Emission limit requested by ADM. Based on stack testing conducted between July 27-29, 1999. The 95% CI from the test was 0.52 lb/hr and 0.0009 gr/scf for PM. ADM has taken emission limits so the maltodextrin project remains a synthetic minor project.

Operational Limits & Requirements

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

Control Device:

Two parallel baghouses shall be used to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4520 / PTO 0

Operating Limits:

Spray dryer shall be limited to the production of maltodextrin
Spray dryer shall burn only natural gas
Authority for Requirement: LCPH ATI 4520 / PTO 0

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County AQD and other federal or state air pollution regulatory agencies and/or their authorized representatives. Records shall be legible and maintained in an orderly manner. All monitors shall be easily accessible to air pollution personnel. These records shall show the following:
Monthly average dryer rate
Monthly natural gas consumption
Daily pressure drop readings for each baghouse
Copies of test results shall be retained until a new approved representative test is conducted or for 5 years, whichever is longer.
Authority for Requirement: LCPH ATI 4520 / PTO 0

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 141
Discharge Style: Vertical
Stack Opening, (inches, diameter): 78
Exhaust Temperature (°F): 155-160
Exhaust Flow Rate (scfm): 65,000
Authority for Requirement: LCPH ATI 4520 / PTO 0

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

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

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

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-124
Process Area: MALTODEXTRIN

Associated Equipment
Associated Emission Unit ID Numbers: EU-124
Emissions Control Equipment ID Number: CE-124
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-124
Emission Unit Description: Maltodextrin Packaging Receiver Dust Collector
Raw Material/Fuel: Maltodextrin
Rated Capacity: 48,000 lb/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCPH ATI 3804 / PTO 3814
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.31 lb/hr, 1.35 tpy
Authority for Requirement: LCPH ATI 3804 / PTO 3814

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate emissions. The control device shall be operated at all times when any equipment controlled by the control device is operating. The control device shall be maintained on this source in a good operating condition at all times.
All appropriate probes and gauges needed to measure the parameters outlined in "Monitoring Requirements" shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 3804/ PTO 3814

Operating Limits:

This unit is not conditioned to anything less than the maximum operating capacity of the device.
Maximum design rate: 48,000 lb/hr
Maximum exhaust airflow rate: 3600 scfm
Authority for Requirement: LCPH ATI 3804 / PTO 3814

Monitoring Requirements:

The following information shall be monitored:
Daily pressure drop readings when operating
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 3804 / PTO 3814

Recordkeeping Requirements:

A log of operation shall be maintained for the above listed unit. The following information shall be recorded and kept on site for a period of no less than 5 years.
Daily pressure drop readings
Copies of test results shall be retained until a new approved representative test is conducted or for 5 years, whichever is longer.
These records shall be available on site at all times for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 3804 / PTO 3814

Monitoring Requirements

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

Stack testing is not required at this time.

Opacity Monitoring:

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

action does not return the observation to no visible emissions, then a Method 9 observation will be required.

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-125
Process Area: MALTODEXTRIN

Associated Equipment
Associated Emission Unit ID Numbers: EU-125
Emissions Control Equipment ID Number: CE-125
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-125
Emission Unit Description: Maltodextrin Vacuum/Reprocess System
Raw Material/Fuel: Maltodextrin
Rated Capacity: 1000 scfm

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): 20%
Authority for Requirement: LCPH ATI 3980 / PTO 4033
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.09 lb/hr, 0.38 tpy
Authority for Requirement: LCPH ATI 3980 / PTO 4033

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)
LCO 10.9(1)"g"

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

Control Device:
A baghouse shall be used to control particulate emissions. The control device shall be operated at all times when any equipment controlled by the control device is operating. The control device shall be maintained on this source in a good operating condition at all times.
All appropriate probes and gauges needed to measure the parameters outlined in "Monitoring Requirements" shall be installed and maintained in a good operating condition.
Authority for Requirement: LCPH ATI 3980 / PTO 4033
Operating Limits:

This source shall be limited to 5865 hours of operation calculated on a 12-month rolling sum. The airflow rate as it associates to emission calculated for this source has been limited to 1000 scfm. Any increase in airflow may necessitate a new Permit to Operate.
Authority for Requirement: LCPH ATI 3980 / PTO 4033

Monitoring Requirements:
The following information shall be monitored:
Monthly hours of operation from a no-resettable hour meter
Daily pressure drop readings when operating
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 3980 / PTO 4033

Recordkeeping Requirements:
A log of operation shall be maintained for the above listed unit. The following information shall be recorded and kept on site for a period of no less than five year.
Hours of operation calculated on a 12-month rolling sum.
Daily pressure drop readings
Record of maintenance and repair completed on the control device.
These records shall be available on site at all times for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 3980 / PTO 4033

Reporting:
Submit an annual report summarizing the hours of operation based on a 12-month rolling sum.
Authority for Requirement: LCPH ATI 3980 / PTO 4033

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

Stack Testing:
Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

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

Opacity Monitoring:

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-129
Process Area: MALTODEXTRIN

Associated Equipment
Associated Emission Unit ID Numbers: EU-129
Emissions Control Equipment ID Number: CE-129
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-129
Emission Unit Description: Maltodextrin Packaging
Raw Material/Fuel: Maltodextrin
Rated Capacity: 54,000 lbs/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): 20%
Authority for Requirement: LCPH ATI 4497 / PTO 0
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.73 lb/hr
Authority for Requirement: LCPH ATI 4497 / PTO 0

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr/scf, 0.73 lb/hr
Authority for Requirement: LCPH ATI 4497 / PTO 0

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

Control Device:
A baghouse shall be used to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LPCH ATI 4497 / PTO 0

Operating Limits:
Loadout of maltodextrin shall be limited to bags and totes.
Authority for Requirement: LCPH ATI 4497 / PTO 0

Operating Condition Monitoring and Recordkeeping:
The following information shall be monitored and recorded:
Daily pressure drop readings
Process rate in lbs/hr calculated on a 12-month rolling average
Records of all maintenance and repair completed to the control equipment
Copies of test results shall be retained until a new approved representative test is conducted or for 5 years, whichever is longer.
All monitors shall be easily accessible to air pollution personnel. All records as required by this permit shall be kept on site for a minimum of five (5) years and shall be available for inspection by the Linn County AQD and other federal or state air pollution regulatory agencies and/or their authorized representatives.
Authority for Requirement: LCPH ATI 4497 / PTO 0

Report Requirements:
The following information shall be submitted to this department by the 30th of January for the previous year:
Submit an annual report summarizing the lb/hr average monthly process rate represented as a 12-month rolling average.
Authority for Requirement: LCPH ATI 4497 / PTO 0

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

Stack Height, (ft, from the ground): 60
Discharge Style: Horizontal
Stack Opening, (inches, diameter): 10
Exhaust Temperature (°F): 60-80
Exhaust Flow Rate (scfm): 8525
Authority for Requirement: LCPH ATI 4497/ PTO 0

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

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-153
Process Area: FRUCTOSE

Associated Equipment
Associated Emission Unit ID Numbers: EU-153
Emissions Control Equipment ID Number: CE-153
Emissions Control Equipment Description: Packed Column Scrubber

---

Emission Unit vented through this Emission Point: EU-153A
Emission Unit Description: Dextrose Evaporation
Raw Material/Fuel: Dextrose
Rated Capacity: 39,000 gallons/hr

Emission Unit vented through this Emission Point: EU-153B
Emission Unit Description: Steepwater Evaporation
Raw Material/Fuel: Stillage
Rated Capacity: 39,000 gallons/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): 20%
Authority for Requirement: LCPH ATI 4103 / PTO 4048
LCO 10.7

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: LCPH ATI 4103 / PTO 4048
567 IAC 23.3(3)"e"
LCO 10.12(2)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.54 lb/hr, 6.74 tpy
Authority for Requirement: LCPH ATI 4103 / PTO 4048

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

Control Device:
A packed column scrubber has been incorporated to control SO_2 and VOC emissions while operating on Stillage. The control equipment shall be maintained in good operating condition at all times. All appropriate probes and gauges needed to measure the parameters in "Monitoring Requirements" shall be installed and maintained in good operating condition.
Authority for Requirement: LCPH ATI 4103 / PTO 4048

Operating Limits:
The packed column scrubber shall be operated at all times while the evaporator is operating on Stillage.
Due to low SO_2 concentrations while operating on Dextrose, the scrubber unit will not be required to operate.
Maximum production feed rate shall be limited to 650 gpm.
The scrub water shall consist of a 5% caustic solution.
Authority for Requirement: LCPH ATI 4103 / PTO 4048

Monitoring Requirements:
The following information shall be monitored:
Water flow through scrubber unit (gpm) when operating.
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 4103 / PTO 4048

Recordkeeping Requirements:
A log of operation shall be maintained for the above listed unit. The following information shall be recorded and kept on site for a period of not less than five years.
Daily scrubber water flow rate readings (gpm).
Records of all maintenance and repair completed on the control device.
These records shall be available on site at all times for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 4103 / PTO 4048

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

Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-034, SEP 114
Process Area: SYRUP / REFINERY

Table Refinery-1. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-034	EU-34A	Carbon Furnace	Carbon	3333 lb/hr	CE-34A, CE-34B	Sly Venturi Impingejet Scrubber, Zero Hearth
SEP-034	EU-34B	Natural Gas Combustion	Natural Gas	23 MMBtu/hr		
SEP-114	EU-114A	Carbon Furnace #2	Carbon	3333 lb/hr	CE-114A, CE-114B	Sly Venturi Impingejet Scrubber, Zero Hearth
SEP-114	EU-114B	Natural Gas Combustion	Natural Gas	23 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.

Table Refinery-2. Emission Limits.

EP	Opacity	PM / PM-10*	SO_2*	NOx*	VOC*	CO*	ATI / PTO #
SEP-034	20%	0.033 gr/dscf, 1.61 lb/hr	4.49 lb/hr	4.49 lb/hr	4.49 lb/hr	11.34 lb/hr	4664 / 5082
SEP-114	20%	0.033 gr/dscf, 1.61 lb/hr	4.49 lb/hr	4.49 lb/hr	4.49 lb/hr	11.34 lb/hr	4665 / 5083

Table Refinery-3. General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-034, SEP-114	Opacity	20%	LCO 10.7

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

Control Device:

A Venturi scrubber shall be used to control particulate and sulfur dioxide emissions. The zero hearth furnace afterburner shall be used to control volatile organic compounds (VOC) and carbon monoxide (CO) emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4664 / PTO 5082
LCPH ATI 4665 / PTO 5083

Operating Limits:
Re-circulation water to the scrubber shall be greater than 350 gallons per minute.
pH of the scrubbing liquor shall be maintained above 5.
This unit shall burn natural gas only.
Authority for Requirement: LCPH ATI 4664 / PTO 5082
LCPH ATI 4665 / PTO 5083

Operating Condition Monitoring and Recordkeeping:
The following shall be monitored and recorded:
Daily pressure drop readings
Daily scrubber water re-circulate rate
Daily scrubber pH
Visible emissions shall be observed on a weekly basis to ensure that no visible emissions occur during material handling of the unit.
Maintenance and repair completed to the control unit
Maintain copies of source test results until a new approved representative test is conducted or for five (5) years, whichever is longer.
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Authority for Requirement: LCPH ATI 4664 / PTO 5082
LCPH ATI 4665 / PTO 5083

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

Table Refinery-4. Stack Characteristics.

		Stack Characteristics				
EP	**LCPH ATI / PTO Numbers**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-034	4664 / 5082	110	Vertical, unobstructed	27	160	5700
SEP-114	4665 / 5083	110	Vertical, unobstructed	30	160	5700

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

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-112
Process Area: SYRUP / REFINERY

Associated Equipment
Associated Emission Unit ID Numbers: EU-112
Emissions Control Equipment ID Number: CE-112
Emissions Control Equipment Description: Refinery Acid Tank Scrubber

---

Emission Unit vented through this Emission Point: EU-112
Emission Unit Description: Refinery Acid Tank Scrubber System
Raw Material/Fuel: 35% Hydrochloric Acid
Rated Capacity: 900 gal/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCPH ATI 4490 / PTO 4701
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.16 lb/hr
Authority for Requirement: LCPH ATI 4490 / PTO 4701

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.16 lb/hr
Authority for Requirement: LCPH ATI 4490 / PTO 4701
567 IAC 23.4(7)
LCO 10.9(1)"g"

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

Control Device:

A packed scrubber shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4490 / PTO 4701

Operating Limits:
Throughput through the tanks shall be limited to 900 gallons per hour (7,884,000 gallons per year) for all tanks combined.
Tanks shall not be removed or added without obtaining the proper permits (if required).
Authority for Requirement: LCPH ATI 4490 / PTO 4701

Operating Condition Monitoring and Recordkeeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Annual acid throughput calculated on a 12-month rolling total.
Records of all maintenance and repair completed to the scrubber.
Authority for Requirement: LCPH ATI 4490 / PTO 4701

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

Stack Height, (ft, from the ground): 45
Discharge Style: Vertical
Stack Opening, (inches, diameter): 8
Exhaust Temperature (°F): 90
Exhaust Flow Rate (scfm): 200
Authority for Requirement: LCPH 4490 / PTO 4701

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

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-090, SEP-091, SEP-092, SEP-093, SEP-094, SEP-097, SEP-516, SEP-540

Process Area: UTILITIES

Table Utilities-1. Emission Point IDs.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SEP-090	EU-90	Boiler Room Emergency Diesel Generator	Diesel Fuel	25 gal/hr
SEP-091	EU-91	Dry Starch Diesel Generator	Diesel Fuel	44.8 gal/hr
SEP-092	EU-92	#3 Cooling Tower Emergency Generator	Diesel Fuel	49.4 gal/hr
SEP-093	EU-93	Alcohol / Waste Treatment Emergency Generator	Diesel Fuel	44.8 gal/hr
SEP-094	EU-94	Fructose Emergency Generator	Diesel Fuel	19 gal/hr
SEP-097	EU-97	Boiler Room 2 Emergency Diesel Generator	Diesel Fuel	44.8 gal/hr
SEP-516	EU-516	Co-Gen Emergency Generator	Diesel Fuel	42.4 gal/hr
SEP-540	EU-540	Co-Gen 2 Emergency Diesel Generator	Diesel Fuel	59.2 gal/hr

Applicable Requirements

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

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

Table Utilities-2. Emission Limits.

EP	Opacity	PM-10*	PM*	SO_2*	NOx*	ATI / PTO #
SEP-090	20%	1.06 lb/hr	gr/dscf, 1.06 lb/hr	0.99 lb/hr	15.1 lb/hr	4705 / 4846
SEP-091	20%	0.86 lb/hr	0.1 gr/dscf, 0.86 lb/hr	3.10 lb/hr	19.64 lb/hr	4706 / 4847
SEP-092	20%	0.95 lb/hr	0.1 gr/dscf, 0.95 lb/hr	3.42 lb/hr	21.66 lb/hr	4707 / 4848
SEP-093	20%	0.86 lb/hr	0.1 gr/dscf, 0.86 lb/hr	3.10 lb/hr	19.64 lb/hr	4708 / 4849
SEP-094	20%	0.81 lb/hr	0.1 gr/dscf 0.81 lb/hr	0.75 lb/hr	11.48 lb/hr	4709 / 4850
SEP-097	20%	0.86 lb/hr	0.1 gr/dscf, 0.86 lb/hr	3.10 lb/hr	19.64 lb/hr	4710 / 4851
SEP-516	20%	0.86 lb/hr	0.1 gr/dscf, 0.86 lb/hr	2.93 lb/hr	18.59 lb/hr	4711 / 4852
SEP-540	20%	1.14 lb/hr	0.1 gr/dscf, 1.14 lb/hr	4.10 lb/hr	25.95 lb/hr	4712 / 4853

*Emission rate used to demonstrate no exceedance of the National Ambient Air Quality Standards (NAAQS).

Table Utilities-3. General Emission Limits.

EP	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-090 SEP-094	Opacity	20%	LCO 10.7
SEP-091 SEP-097 SEP-092 SEP-516 SEP-093 SEP-540	PM	0.1 gr/dscf	567 IAC 23.3(2)”a”(2) LCO 10.9(1)"a"

<u>Operational Limits & Requirements</u>

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

Operating Limits:

This emission unit shall not operate more than 500 hours in any rolling twelve-month period.
This emission unit shall operate on #1 or #2 distillate fuel only.
The sulfur content of the fuel oil shall not exceed 0.5 percent by weight.

Authority for Requirement: LCPH ATI 4705 / PTO 4846
LCPH ATI 4706 / PTO 4847
LCPH ATI 4707 / PTO 4848
LCPH ATI 4708 / PTO 4849
LCPH ATI 4709 / PTO 4850
LCPH ATI 4710 / PTO 4851
LCPH ATI 4711 / PTO 4852
LCPH ATI 4712 / PTO 4853

Operating Condition Monitoring and Recordkeeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspections by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Maintain records clearly showing the type of fuel utilized and the sulfur content of that fuel.
Record the hours of operation for the emission unit for each month of operation.
The annual hours of operation for the emission unit shall be updated on a 12-month rolling basis, for each month of operation.

Authority for Requirement: LCPH ATI 4705 / PTO 4846
LCPH ATI 4706 / PTO 4847
LCPH ATI 4707 / PTO 4848
LCPH ATI 4708 / PTO 4849
LCPH ATI 4709 / PTO 4850
LCPH ATI 4710 / PTO 4851
LCPH ATI 4711 / PTO 4852
LCPH ATI 4712 / PTO 4853

<u>Emission Point Characteristics</u>

The emission point shall conform to the specifications listed below.

Table Utilites-4. Emission Point Characteristics.

		Stack Characteristics				
EP	**LCPH ATI / PTO Numbers**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (acfm)**
SEP-090	4705 / 4846	44	Vertical, unobstructed	8	650	3537
SEP-091	4706 / 4847	30	Vertical, unobstructed	10	650	5018
SEP-092	4707 / 4848	29	Vertical, unobstructed	10	650	6536
SEP-093	4708 / 4849	34	Vertical, unobstructed	8	650	5018
SEP-094	4709 / 4850	50	Vertical, unobstructed	8	650	2358
SEP-097	4710 / 4851	44	Vertical, unobstructed	11	650	5018
SEP-516	4711 / 4852	12	Vertical, unobstructed	10	650	3669
SEP-540	4712 / 4853	12	Vertical, unobstructed	8	964	6879

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

Monitoring Requirements

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

Stack testing is not required at this time.
Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-501
Process Area: COGENERATION

Table Co-gen 1. Emission Point Description.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SEP-501	EU-501A	Co-Gen Boiler #1	Coal	551.50 MMBtu/hr
SEP-501	EU-501AN	Co-Gen Boiler #1	Natural Gas	0.22 MMCF/hr
SEP-501	EU-501BF	Co-Gen Boiler #1	Fuel Oil	
SEP-501	EU-501B	Co-Gen Boiler #2	Coal	551.50 MMBtu/hr
SEP-501	EU-501BN	Co-Gen Boiler #2	Natural Gas	0.22 MMCF/hr
SEP-501	EU-501BF	Co-Gen Boiler #2	Fuel Oil	

Table Co-gen 2. Associated Equipment.

EP	EU	CE ID	CE Description	ME ID
SEP-501	EU-501A	CE-501A CE-501C	Co-gen Boiler #1 Baghouse Limestone Injection	ME-501A, ME-501C, ME-501D
SEP-501	EU-501AN	CE-501A CE-501C	Co-gen Boiler #1 Baghouse Limestone Injection	ME-501A, ME-501C, ME-501D
SEP-501	EU-501B	CE-501B CE-501D	Co-gen Boiler #2 Baghouse Limestone Injection	ME-501B, ME-501C, ME-501E
SEP-501	EU-501BN	CE-501B CE-501D	Co-gen Boiler #2 Baghouse Limestone Injection	ME-501B, ME-501C, ME-501E

Applicable Requirements

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

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

Table Co-gen 3. Opacity Emission Limits.

EP	Opacity	Authority for Requirement
SEP-501	10%	Iowa DNR Permit #86-A-090
SEP-501	20%, 6-minute average[1] except for one 6-minute period per hour of not more than 27%	40 CFR 60.43(f) Subpart Db 40 CFR 60.46b(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)
SEP-501	20%	LCO 10.7

Table Co-gen 4. Particulate Matter Emission Limits.

EP	Particulate Matter	Authority for Requirement
SEP-501	0.03 lb/MMBtu	Iowa DNR Permit #86-A-090 Iowa DNR Permit #86-A-091
SEP-501	0.051 lb/MMBtu[2]	40 CFR 60.43b(a)(1) Subpart Db 40 CFR 60.46b(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Table Co-gen 5. Sulfur Dioxide (SO_2) Emission Limits.

EP	Sulfur Dioxide (SO_2)	Authority for Requirement
For coal supplies (or coal blends) which have an equivalent inlet SO_2 rate greater than 2.0 lb/MMBtu:		
SEP-501	0.85 lb/MMBtu, 30-day rolling average [4,5] 90% reduction of equivalent inlet SO_2 rate[3], 30-day rolling average	EPA PSD Permit Revisions March 1, 1990
For coal supplies (or coal blends) which have an equivalent inlet SO_2 rate less than or equal to 2.0 lb/MMBtu:		
SEP-501	0.20 lb/MMBtu, 30 day rolling average [4,5]	EPA PSD Permit Revisions March 1, 1990
These standards apply at all times except during periods of startup, shutdown, or malfunction:		
SEP-501	1.03 lb/MMBtu, 3-hour rolling average [4,5]	EPA PSD Permit Revisions March 1, 1990
SEP-501	1.2 lb/MMBtu[7] 90% reduction of equivalent inlet SO_2 rate[3], 30-day rolling average	40 CFR 60.42b(a), (e), (g), Subpart Db 40 CFR 60.45b(a) Subpart Db 40 CFR 60.43(a)2 Subpart D 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)
SEP-501	0.45 lb/MMBtu, 30-day rolling average [4,5]	IDNR PSD Permit 93-A-324-S1
SEP-501	1.5 lb/MMBtu when burning liquid fuel	LCO 10.12(1)"b"
SEP-501	5 lb/MMBtu, 2 hour rolling average, when burning solid fuel	LCO 10.12(1)a
SEP-501	500 ppmv	567 IAC 23.3(3) “e”

Table Co-gen 6. Nitrogen Oxides and Carbon Monoxide Emission Limits.

EP	NO_x	CO	Authority for Requirement
SEP-501	0.4 lb/MMBtu, 30-day rolling average[4,5]	0.20 lb/MMBtu, 3-hour average[4,5]	EPA PSD Permit Revisions March 1, 1990
SEP-501	260 ng/J, 0.6 lb/MMBtu, 30-day rolling average[6]		40 CFR 60.44b(a) Subpart Db 40 CFR 60.44b(h-i) Subpart Db 40 CFR 60.46(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Table Co-gen 7. Other Emission Limits.

EP	Fluorides	Lead	Beryllium	Authority for Requirement
SEP-501	0.75 lb/hr, 3-hour average[4,5]			EPA PSD Permit Revisions March 1, 1990
SEP-501		1.24×10^{-4} lb/MMBtu, 0.137 lb/hr, 0.6 tpy	8.28×10^{-8} lb/MMBtu, 9.13×10^{-5} lb/hr, 0.0004 tpy	Iowa DNR Permit #86-A-090 Iowa DNR Permit # 86-A-091

[1]Opacity standards apply at all times except periods of startup, shutdown, or malfunction.
[2]Particulate matter emission standards apply at all times except periods of startup, shutdown, or malfunction.
[3]The equivalent inlet (SO_2) rate means the stack emissions (on a lb/MMBtu heat input basis) that would result from the combustion of "as fired" coal in the boiler without SO_2 adsorption, assuming 100% conversion of sulfur in the coal to SO_2.
[4]Regarding the 3-hour standards, the standards apply at all times except during periods of startup, shutdown, or malfunction. Regarding the 30-day standards, the standards apply at all times including during periods of startup, shutdown, or malfunction.
[5]Two circulating fluidized bed combustion (CFBC) boilers, each limited to a maximum heat input of 551.5 MMBtu/hr; the herein approved boilers. The emission standards apply to each boiler unless otherwise indicated. The boilers will be referred to as CFBC Units 1 and 2.
[6]Nitrogen oxide emission standards apply at all times including periods of startup, shutdown, or malfunction.
[7]No owner or operator of an affected facility that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain sulfur dioxide in excess of the emission limit determined according to the following formula:

$E_s=(K_aH_a + K_bH_b)/(H_a + H_b)$

Where: E_s is the SO_2 emission limit (in either ng/J or lb/MMBtu heat input)
K_a is 520 ng/J or 1.2 lb/MMBtu
K_b is 340 ng/J or 0.8 lb/MMBtu
H_a is the heat input from the combustion of coal (in either J or MMBtu)
H_b is the heat input from the combustion of oil (in either J or MMBtu)

Only the heat input supplied from the combustion of coal or oil is counted. No credit is provided for the heat input from the combustion of natural gas, wood, municipal-type solids waste, or other fuels or heat input from other sources such as gas turbines, internal combustion engines,

kilns, etc. This limit is a 30-day rolling average and applies at all times including periods of startup, shutdown, and malfunction.

Operational Limits & Requirements

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

Initial Compliance:

Valid data include any data collected during any period of coal combustion, including data collected during periods of startup, shutdown, and malfunction. Valid data do not include measurements made during "out-of-control" periods as defined in 40 CFR Part 60, Appendix F, calibration checks, or zero and span adjustments.

A boiler operating day means any 24-hour period from 7:00 am to the following 7:00 am during which any amount of coal is combusted in the boiler. It is not necessary for coal to be combusted continuously for the entire 24-hour period to qualify as a boiler operating day.

Authority for Requirement: EPA PSD Permit Modification March 1, 1990

Continuous Emission Monitoring:

The owner/operator shall continuously demonstrate compliance with the SO_2 and NO_x emission limitations and SO_2 percent reduction requirements of this permit, in part, through the use of continuous emission monitoring systems (CEMs). The owner/operator shall install, calibrate, operate, maintain, audit, and record the output from CEMs capable of measuring SO_2, NO_x, and the appropriate diluent gas (oxygen or carbon dioxide). The CEMs shall be installed, calibrated, operated, maintained, and audited, and data recorded in accordance with the provisions found at 40 CFR 60.13, 40 CFR Part 60 Appendix B Performance Specifications 2 and 3, and 40 CFR 60, Appendix F.

The CEMs shall be operated and data recorded during any period any fuel is combusted in the boiler. Hourly parts-per-million data recorded by the pollutant CEMs shall be converted to lb-pollutant per million BTUs (lb/MMBtu) heat input using the equations and methodology specified in 40 CFR Part 60, Appendix A, Method 19. Hourly emission rate data shall be recorded and used by the owner/operator to calculate compliance with the applicable emission rates and percent reductions for the specified averaging times.

The owner/operator shall also install, operate, and maintain a fuel sampling and analysis (FSA) system to collect "as fired" fuel data. The FSA system shall meet or exceed the design and performance specifications set forth in 40 CFR Part 60, Appendix A, Method 19 (incorporating by reference of ASTM method D2234-76, et al.). As specified by Method 19, at least a minimum number and weight of sample increments shall be collected at a location immediately preceding each day bunker, composited, and analyzed daily. Coal analyses shall be conducted for weight percent sulfur (%S) and gross heat value (GHV, expressed in BTUs/lb-coal).

The owner/operator may develop an in-house coal analysis program or may send collected samples to a laboratory for analysis. In either case, the analytical results shall be available to the CFBC boiler operator within 72 hours of the sample collection time. To ensure that coal analyses are performed in accordance with ASTM methods, EPA will require the owner/operator to conduct periodic analyses of quality assurance audit coal samples provided by EPA.

The "as fired" fuel data will be used to determine the equivalent hourly average SO_2 inlet rate to the boiler, and will be used in conjunction with the SO_2 CEMS emission rate data to determine compliance with the SO_2 30-day rolling percent reduction limit. The "equivalent hourly average

SO_2 inlet rate" means the sulfur input rate expressed in terms of "lbs SO_2/MMBTUs heat input" based on the assumption of 100 percent conversion of sulfur to SO_2.
The owner/operator shall calculate an equivalent SO_2 rate for each bunker using the weight percent sulfur and the gross heating value (GHV) obtained through daily FSA, using the following equation:
Equivalent SO_2 inlet rate of individual bunker = (%S / GHV)K
where K=20,000 (lb*BTUs)/(%*MMBTUs)
If the equivalent inlet SO_2 rates for coal contained in each day bunker which feed to a single CFBC differ by 0.2 lbs SO_2/MMBTUs heat input or less, use the arithmetic average of the two equivalent SO_2 inlet rates as the "equivalent hourly average SO_2 inlet rate" for each hourly percent reduction calculation during the boiler operating day.
Otherwise, (1) use the smaller of the two equivalent SO_2 inlet rates as the "equivalent hourly average SO_2 inlet rate" for each hourly percent reduction calculation during the boiler operating day, (2) calculate an "equivalent hourly average SO_2 inlet rate" for each hour of operation using the following heat input weighted equation.

$$EquivalentHourlyAverageSO_2, InletRate = \frac{W1*\%S1 + W2*\%S2}{W1*GHV1 + W2*GHV2}K$$

W_1 = Tons of coal fed to first of paired day bunkers during hour
W_2 = Tons of coal fed to second of paired day bunkers during hour
$\%S_1$ = Weight percent sulfur of coal contained in first bunker
$\%S_2$ = Weight percent sulfur of coal contained in second bunker
GHV_1 = Gross heating value of coal contained in first bunker
GHV_2 = Gross heating value of coal contained in second bunker
K = 20,000 (bl*BTUs)/(%*MMBTUs)
Further, the owner/operator shall successfully complete SO_2 and NO_x CEMSs performance evaluations (including relative accuracy and calibration drift assessment) under the following two conditions: (1) firing a coal or blend of coals that results, or can reasonably be expected to result, in controlled emissions between 0.0 and 0.6 lb-SO_2/MMBTUs; and (2) firing a coal or blend of coals that results, or can reasonably be expected to result, in controlled emissions of 0.6 or greater lb-SO_2/MMBTUs. Two copies of a written report of the results of each attempt at a performance evaluation, whether successful or not, shall be submitted to the EPA regional office not later than 30 days after the completion or termination of the attempt.
Successful performance test in at least one of the above-specified emission ranges shall be completed prior to beginning the initial compliance demonstration required. The remaining performance evaluations may be run during any of the quarterly Appendix F audits, or at any other time, but must be completed no later than 90 days after any fuel switch which results, or can reasonably be expected to result, in controlled SO_2 emissions in the range for which a successful performance evaluation has not previously been completed.
The owner/operator shall notify the EPA regional office at least 30 days in advance of conducting any relative accuracy test. Operating conditions during the relative accuracy tests shall be established at a pretest meeting to be held no later than 15 days prior to testing.
Authority for Requirement: EPA PSD Permit Modification March 1, 1990
Iowa DNR PSD Permit 93-A-324-S1

Continuous Emission Monitoring and Fuel Sampling Analysis:
For CFBC Boiler #4 and for SO_2 emissions from CFBC Boilers #1, 2, 3:

SO_2
The owner shall continuously demonstrate compliance with the SO_2 emission limitations and the SO_2 percent reduction requirements of this permit through the use of a continuous emission monitoring system (CEMS) and a fuel sampling and analysis (FSA) system. These systems shall be installed, operating and calibrated prior to beginning the initial compliance demonstration according to 40 CFR 60.13.
In the case where a CEMS is to be used as the test method for demonstrating compliance, the performance certification report shall be submitted to IDNR prior to initiating the facility compliance testing.
Unless otherwise approved by the Department, the selection of the CEMS span value (maximum data display output) for each parameter shall be those specified in Subpart Db of the Code of Federal Regulations.
In addition to the provisions of 40 CFR Part 60, Appendix B, the performance specifications applicable to the CEMS required by the permit shall include a data recovery requirement of 90% and shall meet precision and accuracy requirements of 10 percent and 10 percent of the applicable standard respective, unless otherwise specified in the permit. When the minimum data requirements of the permit cannot be obtained, the methods and procedures of 40 CFR 60.47b(c) and 60.48b(F) shall be employed by the owner to obtain the required data.
30-Day Rolling SO_2 Emission Rate Compliance:
The owner shall successfully complete the SO_2 CEMS performance evaluations including relative accuracy and calibration drift assessment evaluations prior to beginning the initial compliance demonstration.
The owner shall notify the DNR central office at least 30 days in advance of conducting any relative accuracy test.
Authority for Requirement: Iowa DNR PSD Permit 93-A-324-S1

Compliance with SO_2 emission rate limitations and the SO_2 percent reduction requirements shall be calculated as the average of all valid hourly emission rate data and valid hourly SO_2 percent reduction data for the 30 previous boiler operating days during which each standard applies. The owner shall calculate a new 30-day average at the end of each boiler operating day.
Authority for Requirement: Iowa DNR PSD Permit 93-A-324-S1
EPA PSP Modification March 1, 1990

Continuing Compliance Demonstration:
Compliance with the SO_2 standards shall be determined separately depending on the equivalent inlet SO_2 rate to the boiler. SO_2 emission rate and percent reduction data collected under the two inlet rate ranges shall not be intermixed except when determining compliance with the short-term standards.
Authority for Requirement: EPA PSD Permit Modification March 1, 1990

Continuous Compliance Monitoring:
Compliance shall be monitored as required utilizing the following methods:
For opacity: Transmissometer with recorder installed and operated per 40 CFR 60.13 and 40 CFR 60.45.
For Sulfur Dioxide: Per the applicable PSD permit.
For Nitrogen Oxides: Per the applicable PSD permit.
For Lead: Coal sampling and analysis on a frequency to be determined based on the initial compliance test. They can be the same samples obtained for the determination of sulfur dioxide inlet levels.
For Beryllium: Coal sampling and analysis on a frequency to be determined based on the initial compliance test. They can be the same samples obtained for the determination of sulfur dioxide inlet levels.
Authority for Requirement: Iowa DNR Permit #86-A-090
Iowa DNR Permit #86-A-091

Fuel-Related Restrictions:
The approved boiler is restricted to coal, with gas or oil startup. The owner/operator must receive the approval of the EPA regional office before a fuel other than coal is combusted in the boiler on a continuing or trial basis. At that time, the agency may impose best available control technology (BACT) emission standards for the fuel type (or combination) in question, even if an emissions reduction will occur with said other fuel types. Other PSD-related requirements may also be imposed. "Coal" means any subbituminous coal supply, any bituminous coal supply, or blends composed of such coal supplies. Said coal may be burned in the boiler only to the extent the BACT and the additional emission standards are met.
Authority for Requirement: EPA PSD Permit Modification March 1, 1990

Operating Condition Monitoring:
For CFBC Boilers #1, 2, 3 and 4, the owner shall maintain a record of periods of startup, shutdown or malfunction. Operating hours shall be averaged on a 12-month basis rolled over monthly.
Authority for Requirement: IDNR PSD Permit #93-A-324-S1

Recordkeeping Requirements:
Any data, records, reports, documentation and calculations required under this permit shall be kept at the plant (and made available during normal business hours) in a form suitable for inspections and copying by federal, state or local air pollution regulatory agencies and their authorized representatives for at least two (2) years from the date of their establishment.
Authority for Requirement: EPA PSD Permit Modification March 1, 1990

Quarterly Reports:
The owner/operator shall submit a written emissions report to the EPA regional office each calendar quarter. The report shall be postmarked by the 30th day following the end of each calendar quarter and shall address each subsection listed in 40 CFR 60.49a. In addition, the report shall include the results of the Appendix F quarterly accuracy assessment, including the daily calibration drift test results, audit results, and other related information outlined in Section 7 of 40 CFR Part 60, Appendix F. The report shall also identify any exceedances of the short-term SO_2 emission limitations.

Authority for Requirement: EPA PSD Permit Modification March 1, 1990

Reporting Requirements:
Excess opacity must be reported to the state orally and in writing per IAC 900-24.1.
Quarterly written excess emission (opacity) reports must be submitted to the state per 40 CFR 60.7(c and 60.45(g)(1). The quarterly report is based on the continuous emission monitoring records and is required even if the excess emissions were "zero."
Sulfur Dioxide reporting per the applicable PSD permit.
Nitrogen Oxides reporting per the applicable PSD permit.
Coal sampling and analysis results for lead are to be reported on a quarterly basis.
Coal sampling and analysis results for beryllium are to be reported on a quarterly basis.
Authority for Requirement: Iowa DNR Permit #86-A-090
Iowa DNR Permit #86-A-091

NSPS General Requirements:
These boilers are subject to 40 CFR 60 NSPS Subpart Db, Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units. The requirements for this subpart are listed in Appendix A.

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. 40 CFR 60.7(b)

The permittee shall submit an excess emissions and monitoring systems performance report to the Department and Administrator in accordance with 40 CFR 60.7(c). The summary report form shall contain the information and format required in 40 CFR 60.7(d).

Notwithstanding the frequency of reporting requirements in the prior permit conditions, the permittee may reduce the frequency of reporting of excess emissions and monitoring system performance reports pursuant to 40 CFR 60.7(e).

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12
Authority for Requirement: 567 IAC 23.1(2)

Existing Large Solid Fuel Subcategory
These emissions units are of the source type regulated by the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters (567 IAC 23.1(4)"dd", 40 CFR Part 63, Subpart DDDDD). On July 30, 2007, the DC Circuit Court vacated this entire standard. Since the standard has been vacated, the units may be subject to the requirements of section 112(j) of the Clean Air Act. Section 112(j) requires the facility to submit an application addressing the control of HAP emissions from these units and also requires that the MACT (Maximum Achievable Control Technology) be incorporated into the facility's Title V operating permit. The Iowa DNR - Air Quality Bureau is currently developing a procedure to implement Section 112(j) requirements, if applicable, for units that were subject to the vacated rule. If the facility is required to modify the units or control equipment to comply with section 112(j), then the facility shall submit an application to modify the required construction permit.

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.
Stack Testing:
The following stack tests shall be performed for **EACH** boiler.

Pollutant – PM-10[1]
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter[1]
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Carbon Monoxide (CO)[1]
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 10 (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Fluorides[1]
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 13B (40 CFR 60) Appendix A
Authority for Requirement – 567 IAC 22.108(3)

[1] ADM may choose to perform the required tests on either Boiler 1 or 2. One set of tests may be used to represent emissions and compliance for both Boiler 1 and 2. If the test results for any pollutant are 90% or above of the applicable standard, additional testing of both boilers shall be required. A test protocol must be approved by the Department's stack testing personnel prior to testing.

Continuous Emissions Monitoring:

Pollutant:	**Sulfur Dioxide (SO_2)**
Continuous Emissions Monitor ID:	ME-501A for Boiler #1
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	September 1989
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	EPA PSD Permit Revisions March 1, 1990 Iowa DNR PSD Permit #93-A-324-S1 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Pollutant:	**Nitrogen Oxides (NO_x)**
Continuous Emissions Monitor ID:	ME-501A for Boiler #1
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	September 1989
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	EPA PSD Permit Revisions March 1, 1990 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Pollutant:	**Nitrogen Oxides (NO_x)**
Continuous Emissions Monitor ID:	ME-501B for Boiler #2
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	September 1989
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	EPA PSD Permit Revisions March 1, 1990 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Pollutant:	**Opacity**
Continuous Emissions Monitor ID:	ME-501C for Boilers #1 and #2
Operational Specifications:	40 CFR Part 60.13 and 40 CFR 60.45
Date of Initial System Calibration & Quality Assurance:	September 1989- initial monitor May 2002- new monitor installed

Ongoing System Calibration/Quality Assurance:	40 CFR 60
Reporting & Record keeping:	40 CFR 60
Authority for Requirement:	Iowa DNR PSD Permit #86-A-090 Iowa DNR PSD Permit #86-A-091 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Other Parameters:

Pollutant:	**Diluent Gas (Oxygen or Carbon Dioxide)**
Continuous Emissions Monitor ID:	ME-501D for Boiler #1
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	September 1989
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	EPA PSD Permit Revisions March 1, 1990 Iowa DNR PSD Permit #93-A-324-S1 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Pollutant:	**Diluent Gas (Oxygen or Carbon Dioxide)**
Continuous Emissions Monitor ID:	ME-501E for Boiler #2
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	September 1989
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	EPA PSD Permit Revisions March 1, 1990 Iowa DNR PSD Permit #93-A-324-S1 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

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)

Refer to Appendix I, Agency O&M Plans, for the complete agency operation and maintenance plan.

Emission Point ID Number: SEP-502
Process Area: COGENERATION

Table Co-gen 8. Emission Point Description.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SEP-502	EU-502A	Co-Gen Boiler #3	Coal	551.50 MMBtu/hr
SEP-502	EU-502AN	Co-Gen Boiler #3	Natural Gas	0.22 MMCF/hr
SEP-502	EU-502AF	Co-Gen Boiler #3	Fuel Oil	
SEP-502	EU-502B	Co-Gen Boiler #4	Coal	551.50 MMBtu/hr
SEP-502	EU-502BN	Co-Gen Boiler #4	Natural Gas	0.22 MMCF/hr
SEP-502	EU-502BF	Co-Gen Boiler #4	Fuel Oil.	

Table Co-gen 9. Associated Equipment.

EP	EU	CE ID	CE Description	ME ID
SEP-502	EU-502A	CE-502A CE-502D	Co-gen Boiler #3 Baghouse Limestone Injection	ME-502A, ME-502C, ME-502D
SEP-502	EU-502AN	CE-502A CE-502D	Co-gen Boiler #3 Baghouse Limestone Injection	ME-502A, ME-502C, ME-502D
SEP-502	EU-502B	CE-502A CE-502B CE-502C CE-502E	Co-gen Boiler #3 Baghouse Co-gen Boiler #4 Baghouse Selective Non-Catalytic Reduction (SNCR) Limestone Injection	ME-502B-1, ME-502B-2, ME-502B1, ME-502B2, ME-502C, ME-502E
SEP-502	EU-502BN	CE-502B CE-502C CE-502E	Co-gen Boiler #4 Baghouse SNCR Limestone Injection	ME_502B-1, ME-502B-2, ME-502B1, ME-502B2, ME-502C, ME-502E

Applicable Requirements

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

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

Table Co-gen 10. Opacity Emission Limits.

EP	EU	Opacity	Authority for Requirement
SEP-502	EU-502A, EU-502AN	10%	Iowa DNR Permit #88-A-022
SEP-502	EU-502A EU-502AN	20%, 6-minute average[1] except for one 6-minute period per hour of not more than 27%	40 CFR 60.42a(2) Subpart D 567 IAC 23.1(2) "a" LCO 10.9(2) "a"(1)
SEP-502	EU-502B, EU-502BN	20%, 6-minute average[1] except for one 6-minute period per hour of not more than 27%	40 CFR 60.43b(f) Subpart Db 40 CFR 60.46b(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)
SEP-502	EU-502B, EU-502BN	20%, 6-minute average[1]	LCPH ATI 3221 / PTO 3134 Iowa DNR PSD Permit #93-A-324-S1
SEP-502	EU-502A, EU-502AN, EU-502B, EU-502BN	20%	LCO 10.7

Table Co-gen 11. Particulate Matter Emission Limits.

EP	EU	PM10	Particulate Matter	Authority for Requirement
SEP-502	EU-502A EU-502AN		0.10 lb/MMBtu	40 CFR 60.42a(1) Subpart D 567 IAC 23.1(2) "a" LCO 10.9(2) "a" (26)
SEP-502	EU-502AN		0.03 lb/MMBtu, 3 hour average	Iowa DNR Permit #88-A-022
SEP-502	EU-502B, EU-502BN		0.051 lb/MMBtu[2]	40 CFR 60.43b(a)(1) Subpart Db 40 CFR 60.46b(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)
SEP-502	EU-502B, EU-502BN	0.03 lb/MMBtu, 3 hour average[4]		LCPH ATI 3221 / PTO 3134 Iowa DNR PSD Permit #93-A-324-S1

Table Co-gen 12. Sulfur Dioxide (SO_2) Emission Limits.

EP	EU	Sulfur Dioxide (SO_2)	Authority for Requirement
For coal supplies (or coal blends) which have an equivalent inlet SO_2 rate[3] greater than 2.0 lb/MMBtu:			
SEP-502	EU-502A, EU-502AN	0.85 lb/MMBtu, 30-day rolling average[5] 90% reduction of equivalent inlet SO_2 emission rate[3], 30-day average	Iowa PSD Permit March 14, 1988 Iowa DNR PSD Permit #90-A-083
For coal supplies (or coal blends) which have an equivalent inlet SO_2 rate[3] less than or equal to 2.0 lb/MMBtu:			
SEP-502	EU-502A, EU-502AN	0.20 lb/MMBtu, 30 day rolling average[5]	Iowa DNR PSD Permit #90-A-083
These standards apply at all times except during periods of startup, shutdown, or malfunction:			
SEP-502	EU-502A, EU-502AN	0.94 lb/MMBtu, 3-hour rolling average[5]	Iowa DNR PSD Permit March 14, 1988 Iowa DNR PSD Permit #90-A-083
SEP-502	EU-502B, EU-502BN	0.94 lb/MMBtu, 3 hour average[4]	Iowa DNR PSD Permit #93-A-324-S1
SEP-502	EU-502A, EU-502AN, EU-502B, EU-502BN	1.2 lb/MMBtu[7] 90% reduction of equivalent inlet SO_2 rate[3], 30-day rolling average	40 CFR 60.42b(a), (e), (g), Subpart Db 40 CFR 60.45b(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55) 40 CFR 60.43(a)2 Subpart D 567 IAC 23.1(2) "a" LCO 10.9(2) "a" (26)
SEP-502	EU-502B, EU-502BN	0.45 lb/MMBtu, 30 day rolling average[4], 90% reduction in the equivalent inlet SO_2 emission rate[3]	Iowa DNR PSD Permit #93-A-324-S1
SEP-502	EU-502A, EU-502AN	0.45 lb/MMBtu, 30-day rolling average [5]	IDNR PSD Permit #93-A-324-S1
SEP-502	EU-502B, EU-502BN	0.45 lb/MMBtu, 30 day rolling average[4]	LCPH ATI 3221 / PTO 3134 Iowa DNR PSD Permit #93-A-324-S1
SEP-502	EU-502A, EU-502AN, EU-502B, EU-502BN	1.5 lb/MMBtu when burning liquid fuel	LCO 10.12(1)"b"

SEP-502	EU-502A, EU-502AN, EU-502B, EU-502BN	5 lb/MMBtu, 2 hour rolling average, when burning solid fuel	LCO 10.12(1)"a"
SEP-502	EU-502A, EU-502AN, EU-502B, EU-502BN	500 ppmv	567 IAC 23.3(3)"e"

Table Co-gen 13. Nitrogen Oxides and Carbon Monoxide Emission Limits.

EP	EU	NO_x	CO	Authority for Requirement
SEP-502	EU-502A, EU-502AN	0.4 lb/MMBtu, 30-day rolling average[5]	0.2 lb/MMBtu, 3 hour average[5]	Iowa DNR PSD Permit March 14, 1988 Iowa DNR PSD Permit #90-A-083
SEP-502	EU-502A EU-502AN	0.70 lb/MMBtu 0.20 lb/MMBtu		40 CFR 60.44a(3) 40 CFR 60.44a(1) 567 IAC 23.1(2)"a" LCO 10.9(2)"a" (26)
SEP-502	EU-502A, EU-502AN EU-502B EU-502BN	260 ng/J, 0.6 lb/MMBtu, 30-day rolling average[7]		40 CFR 60.44b(a) Subpart Db 40 CFR 60.44b(h-i) Subpart Db 40 CFR 60.46(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)
SEP-502	EU-502B, EU-502BN	0.07 lb/MMBtu, 30 days rolling[4]	0.2 lb/MMBtu, 3 hour average[4]	LCPH ATI 3221 / PTO 3134 Iowa DNR PSD Permit #93-A-324-S1

Table Co-gen 14. Other Emission Limits.

EP	EU	Fluorides	Lead	Beryllium	Authority for Requirement
SEP-502	EU-502A, EU-502AN	0.75 lb/hr, 3-hour average[5]			Iowa DNR PSD Permit March 14, 1988 Iowa DNR PSD Permit #90-A-083
SEP-502	EU-502A, EU-502AN		1.24×10^{-4} lb/MMBtu, 0.068 lb/hr, 0.3 tpy	8.28×10^{-8} lb/MMBtu, 4.57×10^{-5} lb/hr, 0.0002 tpy	Iowa DNR Permit #88-A-022
SEP-502	EU-502B, EU-502BN	0.75 lb/hr, 3 tpy, 3 hour average[4]	2.28×10^{-4} lb/MMBtu, 0.55 tpy, 3 month average[4]	1.53×10^{-7} lb/MMBtu, 0.000368 tpy, 12-month rolling average[4]	Iowa PSD Permit #93-A-324-S1

[1]Opacity standards apply at all times except periods of startup, shutdown, or malfunction.
[2]Particulate matter emission standards apply at all times except periods of startup, shutdown, or malfunction.
[3]The equivalent inlet (SO_2) rate means the stack emissions (on a lb/MMBtu heat input basis) that would result from the combustion of "as fired" coal in the boiler without SO_2 adsorption, assuming 100% conversion of sulfur in the coal to SO_2.
[4]The 30-day rolling average standards apply at all times including periods of startup, shutdown or malfunction. All other standards apply at all times except during periods of startup, shutdown or malfunction. The three month averaging period for lead (Pb) shall be rolled over monthly and the twelve month averaging period for Beryllium (Be) shall be rolled over monthly.
[5]The 3-hour standards apply at all times except during periods of startup, shutdown, or malfunction. The 30-day standards apply at all times including during periods of startup, shutdown, or malfunction. Further, DNR is of the opinion that ADM's proposal represents the application of BACT for regulated pollutants and BACT in consideration of the toxic effects of unregulated pollutants.
[6]Nitrogen oxide emission standards apply at all times including periods of startup, shutdown, or malfunction.
[7]No owner or operator of an affected facility that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain sulfur dioxide in excess of the emission limit determined according to the following formula:
$E_s=(K_aH_a + K_bH_b)/(H_a + H_b)$
Where: E_s is the SO_2 emission limit (in either ng/J or lb/MMBtu heat input)
K_a is 520 ng/J or 1.2 lb/MMBtu
K_b is 340 ng/J or 0.8 lb/MMBtu
H_a is the heat input from the combustion of coal (in either J or MMBtu)
H_b is the heat input from the combustion of oil (in either J or MMBtu)
Only the heat input supplied from the combustion of coal or oil is counted. No credit is provided for the heat input from the combustion of natural gas, wood, municipal-type solids waste, or other fuels or heat input from other sources such as gas turbines, internal combustion engines, kilns, etc. This limit is a 30-day rolling average and applies at all times including periods of startup, shutdown, and malfunction.

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

Control Device:
A baghouse shall be used to control particulate emissions. The control equipment shall be maintained on this source in a good operating condition at all times.
Authority for Requirement: LCPH ATI 3221 / PTO 3134

Operating Limits:
The maximum operating capacity of this device is:
Energy Input: 551.5 MMBtu/hr
This boiler shall be allowed to combust coal, with gas or oil startup.
Authority for Requirement: LCPH ATI 3221 / PTO 3134

For CFBC Boilers #1, 2, 3 and 4, the owner shall maintain a record of periods of startup, shutdown or malfunction. Operating hours shall be averaged on a 12-month basis rolled over monthly.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1

Continuous Emission Monitoring:
The owner/operator shall install, calibrate, operate, maintain, audit, and record the output from CEMs capable of measuring SO_2, NO_x, and the appropriate diluent gas (oxygen or carbon dioxide). The CEMs shall be installed, calibrated, operated, maintained, and audited. Data shall be recorded in accordance with the provisions found at 40 CFR 60.13 [Monitoring Requirements], 40 CFR Part 60 Appendix B Performance Specifications 2 and 3 [Specification and Test Procedures for SO_2, NO_x and diluent CEMS]; and 40 CFR 60, Appendix F [Quality Assurance Requirements for Gas CEMS Used for Compliance Determinations], as adopted by the Department by reference.
The CEMs shall be operated and data recorded during any period any fuel is combusted in the boiler. Hourly parts-per-million data recorded by the pollutant CEMs shall be converted to pound-pollutant per million Btus (lb/MMBtu) heat input using the equations and methodology specified in 40 CFR Part 60, Appendix A, Method 19 (as it appears in the July 1, 1992, Code of Federal Regulations). Hourly emission rate data shall be recorded and used by the owner/operator to calculate compliance with the applicable emission rates and percent reductions for the specified averaging times.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988

The owner shall continuously demonstrate compliance with the SO_2 and NO_x emission limitations and the SO_2 percent reduction requirements of this permit through the use of a continuous emission monitoring system (CEMS) and a fuel sampling and analysis (FSA) system. These systems shall be installed, operating and calibrated prior to beginning the initial compliance demonstration according to 40 CFR 60.13.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988

Unless otherwise approved by the Department, the selection of the CEMS span value (maximum data display output) for each parameter shall be those specified in Subpart Db of the Code of Federal Regulations.
The owner shall successfully complete the SO_2 and NO_x CEMS performance evaluations including relative accuracy and calibration drift assessment evaluations prior to beginning the initial compliance demonstration.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1

The owner shall notify the DNR central office at least 30 days in advance of conducting any relative accuracy test.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083

The owner/operator shall successfully complete SO_2 and NO_x CEMS performance evaluations (including relative accuracy and calibration drift assessment) under the following two conditions: (1) firing a coal or blend of coals that results, or can reasonably be expected to result, in controlled emissions between 0.0 and 0.6 lb SO_2/MMBtu; and (2) firing a coal or blend of coals that results, or can reasonably be expected to result, in controlled emissions of 0.60 or greater lb SO_2/MMBtu. Two copies of a written report of the results of each attempt at a performance evaluation, whether successful or not, shall be submitted (postmarked or hand delivered) to the DNR central office not later than 30 days after the completion or termination of the attempt.
The performance evaluations may be run during any of the quarterly Appendix F audits, or at any other time, but must be completed no later than 90 days after any fuel switch which results, or can reasonable be expected to result, in controlled SO_2 emissions in the range for which a successful performance evaluation has not previously been completed.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083

Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all CEMS shall be in continuous operation and shall complete a minimum of one cycle of sampling, analyzing, and recording for each successive 15-minute period (for gaseous monitoring) and one cycle of data reporting for each successive one-hour period. Each CEM shall continuously meet all the data recovery and performance requirements of this permit.
Should the CEMs fail to meet the applicable rolling 30-day data recovery requirements (as calculated each day) for five consecutive days, the owner/operator shall within thirty (30) days of the end of the fifth period demonstrate that the CEMs have complied with all the applicable provisions of this permit.
In order to ensure validation of all CEM compliance data, the owner/operator shall check the system periodically to determine if the CEM readings are both accurate and precise. Quality assurance (QA) checks shall be done in accordance with a written quality control procedure, one daily, for each parameter monitored by assessing the precision and accuracy of the CEM data using at a minimum the manufacturer's recommended quality assurance procedures.
The daily checks shall involve those critical components of the instrument used in measuring the gas concentration of the effluent. All cleaning and adjustments shall be made in accordance with 40 CFR Part 60, Appendix B, and as recommended by the quality control plan.
Unless otherwise approved by the Department of Natural Resources, the selection of CEM span value (maximum data display output) for each parameter shall be 200 percent of the nominal emission limit specified in this permit for that parameter.
For the CEMs which continually monitor and record gaseous emissions of SO_2 and NO_x, the output (in units of the standard) of the specific CEMs will be continual evidence of compliance with the applicable permit emission limitations. Where data produced by the CEM and concurrent data produced pursuant to other methodologies differ for the same period of time, and both the CEMs and the conflicting data are collected in accordance with all applicable provisions and requirements of federal law, regulation, and this permit, the CEMs shall be the best and most probative evidence of the compliance with applicable performance or emission standards of this permit.
Authority for Requirement: Iowa DNR PSD Permit March 14, 1988

In addition to the provisions of 40 CFR Part 60, Appendix B, the performance specifications applicable to the CEMS required by the permit shall include a data recovery requirement of 90%

and shall meet precision and accuracy requirements of 10 percent and 10 percent of the applicable standard respective, unless otherwise specified in the permit. When the minimum data requirements of the permit cannot be obtained, the methods and procedures of 40 CFR 60.47b(c) and 60.48b(F) shall be employed by the owner to obtain the required data.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit March 14, 1988

The operation, emissions and control reporting requirements of this condition shall begin the calendar quarter in which the CEMs become operational, covering the entire quarter or portion thereof. The owner/operator shall, on a calendar-quarter basis, report each one-hour and each 30-day rolling SO_2 emission average, each 30-day rolling SO_2 percent emission reduction, and each 30-day rolling NO_x emission average calculated for each day of boiler operation that quarter.
The reporting requirements of 40 CFR 60.49A, as applicable, are incorporated by reference. The minimum data collection requirements of this permit supersede those of the cited requirements above.
The reports are to be submitted in accordance with 40 CFR 60.7(c).
Authority for Requirement: Iowa DNR PSD Permit March 14, 1988

Emissions Monitoring:
The owner shall use all valid hourly stack emissions data recorded by the CEMS in conjunction with the corresponding equivalent inlet SO_2 rate to calculate each hourly percent SO_2 reduction achieved by the boiler. The 30-day average percent SO_2 reduction shall be calculated as the average of all valid hourly percent reduction values collected during 30 consecutive boiler operating days during which the 90 percent reduction requirement applies.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083

The 30-day average emission limit is calculated as the average of all valid hourly emission rate data recorded by the CEMS during 30 consecutive days during which the 0.85 lb SO_2/MMBtu standard applies. This includes all valid data recorded by the CEMS excluding SO_2 emission rate data collected while burning coal with an equivalent inlet SO_2 rate of 2.0 lb SO_2/MMBtu or less.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083

Compliance with SO_2 and NO_x emission rate limitations and the SO_2 percent reduction requirements shall be calculated as the average of all valid hourly emission rate data and valid hourly SO_2 percent reduction data for the 30 previous boiler operating days during which each standard applies. The owner shall calculate a new 30-day average at the end of each boiler operating day.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988

Verification of compliance with the emission limit shall be made by the owner/operator at the end of each boiler operating hour, using the data collected by the SO_2 CEMS. The three-hour average is calculated as the arithmetic average of all valid hourly data collected during the

previous three boiler operating hours. All exceedances of the limit shall be clearly identified in the quarterly report.
For the initial compliance test, SO_2 from the boiler is continuously monitored during all periods of operation. The 30-day average emission limit is calculated as the average of all valid hourly emission rate data recorded by the CEMS during the first 30 days during which the 0.20 lb SO_2/MMBtu emission rate limitation applies. Emission rate data collected during periods when the 90 percent reduction standard applies shall not be included in the compliance calculation.
Compliance with the SO_2 standards shall be determined separately depending on the equivalent inlet SO_2 rate to the boiler. SO_2 emission rate and percent reduction data collected under the two inlet SO_2 rate ranges shall not be intermixed except when determining compliance with the short-term standards.
Emission rate data and percent reduction values calculated while burning coal with an equivalent inlet SO_2 rate of 2.0 lb SO_2/MMBtu or less are excluded from the 30-day percent reduction calculation and are handled separately.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083

The one-hour average SO_2 and NO_x emission rates measured by the CEMs (and as discussed in 40 CFR 60.13) shall be expressed in terms of lb/MMBtus of heat input and shall be used by the company to calculate the average emission rate for the averaging period in question. At least two (2) data points must be used to calculate each one-hour NO_x average.
After the initial SO_2 and NO_x compliance tests required, compliance with the applicable emission standards of this permit are based on the following verifications made by the owner/operator:
SO_2
Hourly emissions shall be the average of four 15-minute averages analyzed and recorded by the CEM;
The 30-day rolling average emission rate shall be based on the arithmetic average of 30 successive boiler operating days as recorded by the CEM; e.g., 24 one-hour averages per daily average to be included in the previous 29 daily emission averages for a new 30-day rolling average;
The 30-day rolling percent reduction shall be calculated on a daily basis for both the daily average emission recorded by the CEM and daily fuel analysis obtained by daily coal analyses.
NO_x
The 30-day rolling average emission rate shall be based on the arithmetic average of 30 successive boiler operating days as recorded by the CEM.
Authority for Requirement: Iowa DNR PSD Permit March 14, 1988

A boiler operating day means any 24-hour period beginning at 7:00 am and continuing to 7:00 am the following day, during which any amount of coal is combusted in the boiler. It is not necessary for coal to be combusted continuously for the entire 24-hour period to qualify as a boiler operating day. Valid data includes any data collected during any period of coal combustion and at all operating times.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988

SO_2 Percent Reduction Compliance:
The owner/operator shall install, calibrate, operate, and maintain a fuel sampling and analysis (FSA) system to collect "as fired" fuel data. The FSA system shall meet or exceed the design and performance specifications set forth in 40 CFR Part 60, Appendix A, Method 19 (incorporating by reference of ASTM method D2234-76, et al.).
Analyses shall be performed for weight percent sulfur (%S) and gross heat value (GHV, expressed in Btus/lb-coal). The owner may develop an in-house coal analysis program or may send collected samples to a laboratory for analysis. In either case, the analytical results shall be available to the proposed boiler operator within 72 hours of the sample collection time.
The "as fired" fuel data will be used to determine the equivalent hourly average SO_2 inlet rate to the boiler, and shall be used in conjunction with the SO_2 CEMS emission rate data to determine compliance with the SO_2 30-day rolling percent reduction limit.
The owner shall calculate an equivalent SO_2 rate for each bunker using the weight percent sulfur and the gross heating value (GHV) obtained through daily FSA, using the following equation:
Equivalent SO_2 inlet rate of individual bunker = (%S / GHV)K
where K=20,000 (lb*BTUs)/(%*MMBTUs)
If the equivalent inlet SO_2 rates for coal contained in each day bunker which feeds to a single boiler differ by 0.2 lbs SO_2/MMBTUs heat input or less, the arithmetic average of the two equivalent SO_2 inlet rates as the "equivalent hourly average SO_2 inlet rate" for each hourly percent reduction calculation during the boiler operating day.
Otherwise, (1) use the smaller of the two equivalent SO_2 inlet rates as the "equivalent hourly average SO_2 inlet rate" for each hourly percent reduction calculation during the boiler operating day, (2) calculate an "equivalent hourly average SO_2 inlet rate" for each hour of operation using the following heat input weighted equation.

$$EquivalentHourlyAverageSO_2, InletRate = \frac{W1*\%S1 + W2*\%S2}{W1*GHV1 + W2*GHV2}K$$

W_1 = Tons of coal fed to first of paired day bunkers during hour
W_2 = Tons of coal fed to second of paired day bunkers during hour
$\%S_1$ = Weight percent sulfur of coal contained in first bunker
$\%S_2$ = Weight percent sulfur of coal contained in second bunker
GHV_1 = Gross heating value of coal contained in first bunker
GHV_2 = Gross heating value of coal contained in second bunker
K = 20,000 (lb*Btu)/(%*MMBtu)
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083

Compliance Demonstrations:
The following shall apply with regard to all compliance demonstrations:
Each compliance test conducted shall be approved by the IDNR central office.
Each compliance test shall consist of three (3) separate runs. The duration shall be established by the DNR central office representative at the pretest meeting. The arithmetic mean of the results of the three runs shall apply for compliance.
The compliance test method for CO shall be the integrated sample of Method 10 of 40 CFR Part 60, Appendix A. The DNR central office will set forth the test methods and test procedures for fluorides.

Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083

The compliance test method for PM shall be Reference Method 5 per 40 CFR 60.46b; for lead (Pb) shall be reference method 12 of 40 CFR Part 60; and for Beryllium (Be) shall be Reference Method 104 of 40 CFR Part 61, Appendix B.
Opacity measurements shall be conducted per Reference Method 9, 40 CFR Part 60, Appendix A during the initial compliance tests for PM10. Alternatively, the opacity monitor may be used for the initial compliance demonstration according to the procedures in 40 CFR 60.11(e)(5).
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1

For purposes of the time requirements for completion of performance testing of this permit and 40 CFR Part 60, Section 60.8, and the CEM evaluations of Section 60.13, the PSD-implementing agency may allow additional time to comply if the owner or operator meets all of the following criteria.
Uses a real time output continuous emission monitor system to meet the monitoring provisions of this permit
Conducts, during a common set of emission tests, the performance tests, required under this permit, and the performance evaluation of the CEMs required by this permit and Section 60.13(c)
Notifies the PSD-implementing agency in writing, postmarked not less than 60 days prior to the date by which the performance tests would normally be conducted and completed (without extension) of its intentions as specified above.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988

Continuous Compliance:
Compliance shall be monitored as required utilizing the following methods:
Opacity: Transmissometer with recorder installed and operated per 40 CFR 60.13 and 40 CFR 60.45.
Lead: Coal sampling and analysis – frequency to be determined after the initial compliance test. They can be the same samples obtained for the determination of sulfur dioxide inlet levels.
Beryllium: Coal sampling and analysis – frequency to be determined after the initial compliance test. They can be the same samples obtained for the determination of the sulfur dioxide inlet levels.
Authority for Requirement: Iowa DNR Permit #88-A-022

Pretest Meeting:
A pretest meeting shall be held at a mutually agreeable site no later than thirty (30) days prior to the date of each compliance test or the date of each CEMS performance evaluation, whichever occurs first, if performed at different times. Each meeting shall be attended by representatives of the DNR central office, the owner and the compliance testing firm, if used. Representatives of Linn County Health Department shall be invited to attend each pretest meeting and each compliance demonstration.
It shall be the responsibility of the owner to coordinate and schedule each meeting, and to formally notify all participants of each pretest meeting date, compliance test date, and CEMS performance evaluation date.

Upon being notified, the DNR will send to the owner a "proposed test plan" questionnaire. The questionnaire shall be completed by the owner and submitted to the DNR as directed. The completed questionnaire must be received by the DNR no later than fifteen (15) working days prior to the pretest meeting date.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083

Additional Notices:
The Department reserves the right to impose additional, different, or more detailed testing requirements as the need arises. It is the responsibility of the owner to locate the test ports to be used during compliance testing.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1

CO and Fluoride Testing:
The boiler shall be tested by the owner/operator for verification of compliance with the carbon monoxide (CO) and fluorides (F) BACT emission standards initially and at such other times as may be requested by the PSD implementing agency, unless the owner/operator demonstrates to the agency's satisfaction through some other means that the applicable standard is being met.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988

CO and NO_x Testing:
The carbon monoxide and NO_x compliance tests shall be conducted under the same operating/combustion conditions. Compliance with the NO_x/BACT emission limit shall take preference if difficulties are encountered in achieving simultaneous compliance with these BACT emission limits. If such difficulties are encountered, the owner/operator may subsequently request a revision of the CO/BACT emission limit.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988
Iowa DNR PSD Permit #93-A-324-S1

Fuel-Related Restrictions:
The approved boiler is restricted to coal, with gas or oil startup. The owner/operator must receive the approval of the DNR central office before a fuel other than coal is combusted in the boiler on a continuing or trial basis. At that time, the agency may impose BACT emission standards (including a percent reduction requirement) for the fuel type (or combination) in question even if an emissions reduction will occur with said other fuel type(s). Other PSD-related requirements (e.g., dispersion modeling studies) may also be imposed. Coal means any subbituminous coal supply, any bituminous coal supply, or blends composed of such coal supplies. Said coal may be burned in the boiler only to the extent the BACT and the additional emission standards are met.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988

Fuel shall be limited to number 1 or number 2 fuel oil with a sulfur content not to exceed 0.5 percent by weight.
Authority for Requirement: LCO 10.12(1)"c"
567 IAC 23.3(3)"b"(1)

To ensure that coal analyses are performed in accordance with ASTM methods, EPA will require the owner/operator to conduct periodic analyses of quality assurance audit coal samples provided by EPA.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083

The boiler fuel is restricted to coal, with gas or oil startup. The owner must receive the approval of the DNR central office before a fuel other than coal is combusted in the boiler. The agency may impose best available control technology (BACT) emission standards (including a percent reduction requirement) for the fuel type (or combination) in question even if an emissions reduction will occur with the other fuel type(s). Other PSD-related procedures (e.g., dispersion modeling studies) may also be required.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1

On and after the startup date of the CFBC Boiler, the owner/operator of the plant shall not combust a fuel other than natural gas in the existing dryers at the plant. The owner/operator shall also maintain a record which contains information of the type, quality and quantity of the fuel combusted in the boilers and any other pertinent information necessary to verify compliance with this condition.
Verification of compliance with the requirements of this condition shall be made by the owner/operator on a yearly basis.
All exceedances of the limitations shall be reported to the DNR central office no later than thirty (30) days after the determination is made by the owner/operator.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083

Particulate (PM_{10}):
The existing continuous monitoring system for measuring the opacity of emissions discharged into the atmosphere shall be operated, and maintained during all periods of operation of the boiler except for continuous monitoring system breakdowns and repairs. Operation shall be in conformance with 40 CFR 60.48b which includes recording the output of the system. Reporting and recordkeeping requirements shall be in conformance with 40 CFR 60.49b which shall include filing a quarterly report of excess emissions as outlined therein.
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1

PSD review may be required with regard to particulate matter emissions from the approved boilers if and when the owner/operator is relieved of nonattainment area related requirements. The PSD regulation which will be used to address applicability with regard to particulate matter will be the regulation which is in effect at that time.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988

Lead (Pb) and Beryllium (Be):
Coal samples shall be analyzed for Lead (Pb) and Beryllium (Be) and the results submitted in writing to the IDNR on a quarterly basis. Fuel sampling shall be conducted as specified in Condition 14.A.2. Samples analysis for Lead (Pb) and Beryllium (Be) shall be performed as specified in SW-846 Method 6010. The test results shall be reported as specified.

Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1

Turbine Installation:
If a turbine/generator is to be installed as part of the project, the turbine shall be a conventional, unfired, steam turbine.
Authority for Requirement: Iowa DNR PSD Permit March 14, 1988
Iowa DNR PSD Permit #90-A-083

Notification, Reporting and Recordkeeping:
The owner shall furnish the IDNR written notification of the following conditions:
Any usage of this source contrary to those limitations specified as required by Chapter 24 of the IAC.
The anticipated date of each performance test postmarked not more than forty-five (45) days nor less than thirty (30) days prior to the date of the test.
The anticipated dates of the operational test period, test protocol, and daily schedule of the monitor tests postmarked thirty (30) days prior to such activities.

The owner shall furnish the IDNR written reports as follows:
Initial Compliance Demonstration Reports.
The owner shall submit a written emissions report to the IDNR central office each calendar quarter. Reports shall be submitted to the IDNR postmarked no later than 30 days after the end of the calendar quarter starting with the quarter in which initial start-up of the boiler occurs.
The report shall include the following:
Calendar dates covered by the report
Dates and hours of startup, shutdown, or malfunction
Types, quality, and quantity of fuel combusted
Each hourly SO_2, NO_x, opacity and diluent gas emission rate as well as each operating day's 30-day average SO_2, and NO_x emission rate and percent SO_2 reduction determined during the reporting period.
Each instance of excess emissions, and of non-standard or manual data collection and how those data were collected. Where data was excluded, exceeded full span of the CEMS or was not available for any reasons, together with reasons for each of these instances of noncompliance and a description of the corrective actions taken, and any statistics required pursuant to 40 CFR 60.49b(m).
"F" factor, method of determination and fuel description
Description of any modification to the CEMS and its potential effect on CEMS performance
Results of daily CEMSs drift test and quarterly accuracy assessments and related data as required under 40 CFR Part 60, Appendix F

Coal sampling and analysis results
PM10, Lead (Pb) and Beryllium (Be) quarterly test results
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1
Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988

Reporting Requirements:

Excess opacity must be reports to the state orally and in writing per IAC 900—24.1(455B). Quarterly written excess emission (opacity) reports must be submitted to the state per 40 CFR 60.7(c) and 60.45(g)(1). The quarterly report is based on the continuous emission monitoring records and is required even if the excess emissions were "zero."
Coal sampling and analysis results are to be reported on a quarterly basis along with the opacity excess emissions report for lead.
Coal sampling and analysis results are to be reported on a quarterly basis along with the opacity excess emissions report for beryllium.
Authority for Requirement: Iowa DNR Permit #88-A-022

Copies of all reporting required in PSD Permit 93-A-324-S1 shall be submitted to LCPH.
Authority for Requirement: LCPH ATI 3221 / PTO 3134

Records Retention:
Any data, records, reports, documentation, and calculations required to be kept under this permit shall be available at the plant during normal business hours in a form suitable for inspection and copying by federal, state, or local air pollution regulatory agencies, and their authorized representatives for at least five (5) years from the date of their establishment.
Authority for Requirement: Iowa DNR PSD Permit #90-A-083
Iowa DNR PSD Permit March 14, 1988
Iowa DNR PSD Permit #93-A-324-S1

NSPS General Requirements:
These boilers are subject to 40 CFR 60 NSPS Subpart Db, Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units. The requirements for this subpart are listed in Appendix A.

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. 40 CFR 60.7(b)

The permittee shall submit an excess emissions and monitoring systems performance report to the Department and Administrator in accordance with 40 CFR 60.7(c). The summary report form shall contain the information and format required in 40 CFR 60.7(d).

Notwithstanding the frequency of reporting requirements in the prior permit conditions, the permittee may reduce the frequency of reporting of excess emissions and monitoring system performance reports pursuant to 40 CFR 60.7(e).

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Existing Large Solid Fuel Subcategory
These emissions units are of the source type regulated by the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters (567 IAC 23.1(4)"dd", 40 CFR Part 63, Subpart DDDDD). On July 30, 2007, the DC Circuit Court vacated this entire standard. Since the standard has been vacated, the units may be subject to the requirements of section 112(j) of the Clean Air Act. Section 112(j) requires the facility to submit an application addressing the control of HAP emissions from these units and also requires that the MACT (Maximum Achievable Control Technology) be incorporated into the facility's Title V operating permit. The Iowa DNR - Air Quality Bureau is currently developing a procedure to implement Section 112(j) requirements, if applicable, for units that were subject to the vacated rule. If the facility is required to modify the units or control equipment to comply with section 112(j), then the facility shall submit an application to modify the required construction permit.

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

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

Stack Height, (ft, from the ground): 350
Stack Opening, (meters, diameter): 3.45
Exhaust Temperature (°F): 320°F
Exhaust Flow Rate (acfm): 400,900 (combined Boilers #3 and #4)
UTM Location: 4,642,020.0 meters Northerly and 608,775.0 meters Easterly
Authority for Requirement: Iowa DNR PSD Permit #93-A-324-S1

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

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

Stack Testing:
The following stack tests shall be performed for **EACH** boiler.

Pollutant – PM-10[1]
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter[1]
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Carbon Monoxide (CO)[1]
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 10 (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Fluorides[1]
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 13B (40 CFR 60) Appendix A
Authority for Requirement – 567 IAC 22.108(3)

[1]ADM may choose to perform the required tests on either Boiler 3 or 4. One set of tests may be used to represent emissions and compliance for both Boiler 3 and 4. If the test results for any pollutant are 90% or above of the applicable standard, additional testing of both boilers shall be required. A test protocol must be approved by the Department's stack testing personnel prior to testing.

Continuous Emissions Monitoring:

Pollutant:	**Nitrogen Oxides (NO_x)**
Continuous Emissions Monitor ID:	ME-502A for Boiler #3
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	October 1989
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	Iowa DNR PSD Permit #90-A-083 Iowa DNR PSD Permit March 14, 1988 40 CFR 60 Subpart Db 40 CFR Subpart D 567 IAC 23.1(2)"ccc" 567 IAC 23.1(2) "a" LCO 10.9(2)"a"(55) LCO 10.9(2) "a" (26)

Pollutant:	**Sulfur Dioxide (SO_2)**

Continuous Emissions Monitor ID:	ME-502A for Boiler #3
Operational Specifications:	40 CFR 60 Subpart Db
Date of Initial System Calibration & Quality Assurance:	November 1994
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	Iowa DNR PSD Permit #90-A-083 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Pollutant:	**Sulfur Dioxide (SO_2)**
Continuous Emissions Monitor ID:	ME-502B-1 for Boiler #4
Operational Specifications:	40 CFR 60 Subpart Db
Date of Initial System Calibration & Quality Assurance:	November 1994
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	Iowa DNR PSD Permit #93-A-324-S1 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Pollutant:	**Nitrogen Oxides (NO_x)**
Continuous Emissions Monitor ID:	ME-502B-2 for Boiler #4
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	November 1994
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	Iowa DNR PSD Permit #93-A-324-S1 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Pollutant:	**Opacity**
Continuous Emissions Monitor ID:	ME-502C for Boilers #3 and #4
Operational Specifications:	40 CFR Part 60.13 and 40 CFR 60.45
Date of Initial System Calibration & Quality Assurance:	May 2002
Ongoing System Calibration/Quality Assurance:	40 CFR 60
Reporting & Record keeping:	40 CFR 60
Authority for Requirement:	Iowa DNR PSD Permit #93-A-324-S1

	Iowa DNR PSD Permit #88-A-022 40 CFR 60 Subpart Db 40 CFR Subpart D 567 IAC 23.1(2)"ccc" 567 IAC 23.1(2) "a" LCO 10.9(2)"a"(55) LCO 10.9(2) "a" (26)

Other Parameters:

Pollutant:	**Diluent Gas (Oxygen)**
Continuous Emissions Monitor ID:	ME-502D for Boiler #3
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	October 1989
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	Iowa DNR PSD Permit #93-A-324-S1 Iowa DNR PSD Permit #90-A-083 Iowa DNR PSD Permit March 14, 1988 40 CFR 60 Subpart Db 40 CFR 60 Subpart D 567 IAC 23.1(2)"ccc" 567 IAC 23.1(2) "a" LCO 10.9(2)"a"(55) LCO 10.9(2) "a" (26)

Pollutant:	**Diluent Gas (Oxygen)**
Continuous Emissions Monitor ID:	ME-502E for Boiler #4
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	November 1994
Ongoing System Calibration/Quality Assurance:	40 CFR 60, Appendix F
Reporting & Record keeping:	40 CFR 60, Appendix A and B
Authority for Requirement:	Iowa DNR PSD Permit #93-A-324-S1 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

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)

Refer to Appendix I, Agency O&M Plans, for the complete Agency operation and maintenance plans.

Emission Point ID Number: SEP-503
Process Area: COGENERATION

Table Co-gen 15. Associated Equipment.

EP	EU	EU Description	Raw Material / Fuel	Rated Capacity	CE ID	CE Description
SEP-503	EU-503	Bunker Dust Collector	Coal	600 ton/hr	CE-503	Baghouse

Applicable Requirements

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

Table Co-gen 16. Emission Limits.

EP	EU	Opacity	Particulate Matter	Permit #
SEP-503	EU-503	0% <5% at pick-up points	0.01 gr/dscf	Iowa DNR Permit #86-A-093

Table Co-gen 17. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-503	EU-503	Opacity	20%	LCO 10.7 40 CFR 60.252(c) Subpart Y 567 IAC 23.1(2)"v" LCO 10.9(2)"a"(22)
		PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"

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

NSPS Requirements:
These units are subject to 40 CFR 60 NSPS Subpart Y, Standards of Performance for Coal Preparation Plants. The requirements for this subpart are listed in Appendix C.

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

Opacity Monitoring:

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

If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-504
Process Area: COGENERATION

Table Co-gen 18. Associated Equipment.

EP	EU	EU Description	Raw Material / Fuel	Rated Capacity	CE ID	CE Description
SEP-504	EU-504	Crusher Building D.C. System	Coal	1800 ton/hr	CE-504	Baghouse

Applicable Requirements

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

Table Co-gen 19. Emission Limits.

EP	EU	Opacity	Particulate Matter	Permit #
SEP-504	EU-504	0% <5% at pick-up points	0.01 gr/dscf	Iowa DNR Permit #86-A-092

Table Co-gen 20. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-504	EU-504	Opacity	20%	LCO 10.7 40 CFR 60.252(c) Subpart Y 567 IAC 23.1(2)"v" LCO 10.9(2)"a"(22)
		PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"

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

NSPS Requirements:
These units are subject to 40 CFR 60 NSPS Subpart Y, Standards of Performance for Coal Preparation Plants. The requirements for this subpart are listed in Appendix C.

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

Opacity Monitoring:

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

action does not return the observation to no visible emissions, then a Method 9 observation will be required.
If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Refer to Appendix I, Agency O&M Plans, for the complete agency operation and maintenance plans.

Emission Point ID Number: SEP-505
Process Area: COGENERATION

Associated Equipment
Associated Emission Unit ID Numbers: EU-505
Emissions Control Equipment ID Number: CE-505
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-505
Emission Unit Description: Limestone Unloading D.C.
Raw Material/Fuel: Limestone
Rated Capacity: 250 ton/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): 20%
Authority for Requirement: LCO 10.7

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"(2)
LCO 10.9(1)"a"

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a

continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-506, SEP-507, SEP-520, SEP-532, SEP-533
Process Area: COGENERATION

Table Co-gen 21. Associated Equipment.

EP	EU	EU Description	Raw Material / Fuel	Rated Capacity	CE ID	CE Description
SEP-506	EU-506	Fly Ash Conveying D.C. System A	Fly Ash	55 ton/hr	CE-506	Baghouse
SEP-507	EU-507	Fly Ash Conveying D.C. System B	Fly Ash	55 ton/hr	CE-507	Baghouse
SEP-520	EU-520	Fly Ash Conveying D.C. System C	Fly Ash	55 ton/hr	CE-520	Baghouse
SEP-532	EU-532	Fly Ash Conveying System D	Fly Ash	30 ton/hr	CE-532	Baghouse
SEP-533	EU-533	Fly Ash Conveying System F	Fly Ash	30 ton/hr	CE-533	Baghouse

Applicable Requirements

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

Table Co-gen 22. Emission Limits.

EP	EU	Opacity	PM-10	Particulate Matter	Permit #
SEP-506	EU-506	0%		0.02 gr/dscf	Iowa DNR Permit #86-A-096
SEP-507	EU-507	0%		0.02 gr/dscf	Iowa DNR Permit #88-A-023
SEP-520	EU-520	0%		0.02 gr/dscf, 0.72 lb/hr	LCPH ATI 3438 / PTO 3223 Iowa DNR Permit #86-A-096 Iowa DNR Permit #88-A-023
SEP-532	EU-532	10%	0.01 gr/dscf		Iowa DNR PSD Permit #98-A-509P LCPH ATI 3735 / PTO 4739
SEP-532	EU-532			0.01 gr/dscf	LCPH ATI 3735 / PTO 4739
SEP-533	EU-533	10%	0.01 gr/dscf		Iowa DNR PSD Permit #98-A-510P LCPH ATI 3734 / PTO 4738
SEP-533	EU-533			0.01 gr/dscf	LCPH ATI 3734 / PTO 4738

Table Co-gen 23. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-506	EU-506	Opacity	20%	LCO 10.7
SEP-507 SEP-520 SEP-532 SEP-533	EU-507 EU-520 EU-532 EU-533	PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"

<u>Operational Limits & Requirements</u>

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

Control Device:

A baghouse shall be used to control particulate matter emissions for SEP-520, SEP-532 and SEP-533. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 3438 / PTO 3223
LCPH ATI 3735 / PTO 4739
LCPH ATI 3734 / PTO 4738

Operating Limits:

SEP-520 source shall be used solely as a back-up source to Fly Ash Systems A and B (SEP-506 and SEP-507) and therefore is subject to all applicable conditions in IDNR Permits 88-A-022 and 86-A-096. At no time shall more than two of the three systems operate simultaneously.

Airflow to the baghouse shall be limited to 4175 scfm. Any increase in airflow would be considered a major modification and would necessitate a new authorization to install permit.

Authority for Requirement: LCPH ATI 3438 / PTO 3223

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

Table Co-gen 24. Stack Characteristics.

			Stack Characteristics			
EP	**EU**	**Permit Numbers**	**Stack Height (feet, above ground)**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (acfm)**
SEP-532	EU-532	IDNR PSD Permit #98-A-509P LCPH ATI 3735 / PTO 4739	160	1.34 feet Vertical, unobstructed	140	5363
SEP-533	EU-533	IDNR PSD Permit #98-A-510P LCPH ATI 3734 / PTO 4738	160	1.34 feet Vertical, unobstructed	140	5363

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

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

Stack testing is not required at this time.

Opacity Monitoring:
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. .
Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required.
If an opacity > 0% is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-508, SEP-511, SEP-534, SEP-538
Process Area: COGENERATION

Table Co-gen 25. Associated Equipment.

EP	EU	EU Description	Raw Material / Fuel	Rated Capacity	CE ID	CE Description
SEP-508	EU-508	Fly Ash Silo Vent D.C.	Fly Ash	110 ton/hr	CE-508	Baghouse
SEP-511	EU-511	Bed Ash Silo Vent D.C.	Bed Ash	85 ton/hr	CE-511	Baghouse
SEP-534	EU-534	Fly Ash Silo Vent	Fly Ash	30 ton/hr	CE-534	Baghouse
SEP-538	EU-538	Bed Ash Silo Vent	Bed Ash	14 ton/hr	CE-538	Baghouse

Applicable Requirements

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

Table Co-gen 26. Emission Limits.

EP	EU	Opacity	PM-10	Particulate Matter	Permit #
SEP-508	EU-508	0%		0.02 gr/dscf	Iowa DNR Permit #86A-095
SEP-511	EU-511	0%		0.02 gr/dscf	Iowa DNR Permit #86-A-097
SEP-534	EU-534	10%	0.012 gr/dscf	0.012 gr/dscf	Iowa DNR PSD Permit #98-A-511-P2 LCPH ATI 3733 / PTO 4737
SEP-534	EU-534		0.21 lb/hr*		Iowa DNR PSD Permit #98-A-511-P2 LCPH ATI 3733 / PTO 4737
SEP-538	EU-538	10%	0.012 gr/dscf	0.012 gr/dscf	Iowa DNR PSD Permit #98-A-515-P2 LCPH ATI 3729 / PTO 4733
SEP-538	EU-538		0.21 lb/hr*		Iowa DNR PSD Permit #98-A-515-P2 LCPH ATI 3729 / PTO 4733

*Emission rate used to demonstrate the boiler project was below PSD significant impact levels for PM10.

Table Co-gen 27. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-508	EU-508	Opacity	20%	LCO 10.7
SEP-511 SEP-534 SEP-538	EU-511 EU-534 EU-538	PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"

Operational Limits & Requirements

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

Control Device:
A baghouse shall be used to control particulate matter emissions for SEP-534 and SEP-538. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 3733 / PTO 4737
LCPH ATI 3729 / PTO 4733

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Table Co-gen 28. Stack Characteristics.

			Stack Characteristics			
EP	**EU**	**Permit Numbers**	**Stack Height (feet, above ground)**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-534	EU-534	IDNR PSD Permit #98-A-511-P2 LCPH ATI 3733 / PTO 4737	127	24 x 48 Horizontal	70	2100
SEP-538	EU-538	IDNR PSD Permit #98-A-515-P2 LCPH ATI 3729 / PTO 4733	127	24 x 48 Horizontal	70	2100

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

Monitoring Requirements

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

Stack testing is not required at this time.

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. .
Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required.
If an opacity greater than the applicable standard listed in Table Co-gen 26 above is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-509, SEP-510, SEP-535, SEP-536, SEP-541
Process Area: COGENERATION

Table Co-gen 29. Associated Equipment.

EP	EU	EU Description	Raw Material / Fuel	Rated Capacity	CE ID	CE Description
SEP-509	EU-509	Bed Ash Conveying D.C. System A	Bed Ash	15 ton/hr	CE-509	Baghouse
SEP-510	EU-510	Bed Ash Conveying D.C. System B	Bed Ash	15 ton/hr	CE-510	Baghouse
SEP-535	EU-535	Bed Ash Conveying System D	Bed Ash	7 ton/hr	CE-535	Baghouse
SEP-536	EU-536	Bed Ash Conveying System E	Bed Ash	7 ton/hr	CE-536	Baghouse
SEP-541	EU-541	Bed Ash Conveying System C	Bed Ash	15 ton/hr	CE-509 CE-510	Baghouse Baghouse

Applicable Requirements

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

Table Co-gen 30. Emission Limits.

EP	EU	Opacity	PM-10	Particulate Matter	Permit #
SEP-509	EU-509	0%		0.02 gr/dscf	Iowa DNR Permit #86-A-099
SEP-510	EU-510	0%		0.02 gr/dscf	Iowa DNR Permit #86-A-100
SEP-535	EU-535	10%	0.01 gr/dscf		Iowa DNR PSD Permit #98-A-512P LCPH ATI 3732 / PTO 4736
SEP-535	EU-535			0.01 gr/dscf	LCPH ATI 3732 / PTO 4736
SEP-536	EU-536	10%	0.01 gr/dscf		Iowa DNR PSD Permit #98-A-513P LCPH ATI 3731 / PTO 4735
SEP-536	EU-536			0.01 gr/dscf	LCPH ATI 3731 / PTO 4735
SEP-541	EU-541	0%	0.02 gr/dscf, 0.37 lb/hr*	0.02 gr/dscf, 0.37 lb/hr*	LCPH ATI 4561 / PTO 4741

*IDNR emission limit for permit 86-A-099 (EP#509) and 86-A-100 (EP#510). This source has existed as a backup source since mid-1980s. This permit allows two of the three blowers to operate simultaneously (Bed Ash System A, B, or C). Bed Ash System C (EP541) uses the

baghouse from system A or system B to control emissions. Permitting this source shall result in no increase of emissions.

Table Co-gen 31. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-509	EU-509	Opacity	20%	LCO 10.7
SEP-510 SEP-535 SEP-536 SEP-541	EU-510 EU-535 EU-536 EU-541	PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"

<u>Operational Limits & Requirements</u>

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

Control Device:

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

Authority for Requirement: LCPH ATI 3732 / PTO 4736
LCPH ATI 3731 / PTO 4735
LCPH ATI 4561 / PTO 4741

Operating Limits:

Only two of the three blowers between systems A (EP509), B (EP510) or C (EP541) shall operate at the same time.

Authority for Requirement: LCPH ATI 4561 / PTO 4741

Operating Condition Monitoring and Recordkeeping:

Record weekly magnahelic readings for baghouses CE509 and CE510.

Record all maintenance and repair completed to baghouses CE509 and CE510.

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

Authority for Requirement: LCPH ATI 4561 / PTO 4741

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

Table Co-gen 32. Stack Characteristics.

			Stack Characteristics			
EP	**EU**	**Permit Numbers**	**Stack Height (feet, above ground)**	**Stack Opening (diameter)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (acfm)**
SEP-535	EU-535	IDNR PSD Permit #98-A-512P LCPH ATI 3732 / PTO 4736	160	1.17 feet Vertical, unobstructed	140	3478
SEP-536	EU-536	Iowa DNR Permit #98-A-513P LCPH ATI 3731 / PTO 4735	160	1.17 feet Vertical, unobstructed	140	3478
SEP-541	EU-541	LCPH ATI 4561 / PTO 4741	15	8 inches Horizontal from the side of building	150	2500

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

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

Stack Testing (required for EP 509 and 510):

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Stack testing is not required at this time for EP 535, 536, 541.

Opacity Monitoring:
The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective

action does not return the observation to no visible emissions, then a Method 9 observation will be required.

If an opacity greater than the applicable standard listed in Table Co-gen 30 above is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-512, SEP-513
Process Area: COGENERATION

Table Co-gen 33. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-512	EU-512	Transferring Limestone into Storage D.C.	Limestone	250 ton/hr	CE-512	Bin Vent Filter
SEP-513	EU-513	Transferring Limestone into Storage D.C.	Limestone	250 ton/hr	CE-513	Bin Vent Filter

Applicable Requirements

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

Table Co-gen 34. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-512 SEP-513	EU-512 EU-513	Opacity	20%	LCO 10.7
		PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.
Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-514
Process Area: COGENERATION

Associated Equipment
Associated Emission Unit ID Numbers: EU-514
Emissions Control Equipment ID Number: CE-514
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-514
Emission Unit Description: Coal Truck Dump Pit D.C.
Raw Material/Fuel: Coal
Rated Capacity: 1200 ton/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): 10%
Authority for Requirement: Iowa DNR Permit #86-A-094
LCPH ATI 2299 / PTO 2287

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCO 10.7
40 CFR 60.252(c) Subpart Y
567 IAC 23.1(2)"v"
LCO 10.9(2)"a"(22)

Pollutant: Particulate Matter
Emission Limit(s): 0.18 tpy
Authority for Requirement: Iowa DNR Permit #86-A-094

Pollutant: Particulate Matter
Emission Limit(s): 1.7 lb/hr, 4.862 tpy
Authority for Requirement: LCPH ATI 2299 / PTO 2287

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"(2)
LCO 10.9(1)"a"

Operational Limits & Requirements

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

Control Device:

This source shall have a baghouse installed, operating and maintained anytime the coal truck dump system is being operated.
Authority for Requirement: LCPH ATI 2299 / PTO 2287

Operating Limits:

This source shall be limited to a monthly average of 110 hours of operation per week.
Authority for Requirement: LCPH ATI 2299 / PTO 2287

Recordkeeping:

A logbook of operations for the coal truck dump pit dust collection system shall be maintained. The following information shall be recorded and kept on site for a period of no less than five years.
Hours of operation of the coal truck dump pit dust collection system
Records of all maintenance and repair completed on the control device
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 2299 / PTO 2287

Reporting:

Submit a quarterly report listing the hours of operation by the 15th of each month for the previous quarter (January 15, April 15, July 15, and October 15).
Authority for Requirement: LCPH ATI 2299 / PTO 2287

NSPS Requirements:

These units are subject to 40 CFR 60 NSPS Subpart Y, Standards of Performance for Coal Preparation Plants. The requirements for this subpart are listed in Appendix C.

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

Monitoring Requirements

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

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

Opacity Monitoring:

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-521
Process Area: COGENERATION

Associated Equipment
Associated Emission Unit ID Numbers: EU-521
Emissions Control Equipment ID Number: CE-521
Emissions Control Equipment Description: Venturi Scrubber and Neutralization Tank Spray Scrubber

---

Emission Unit vented through this Emission Point: EU-521
Emission Unit Description: Co-Gen HCl and Neutralization Tanks
Raw Material/Fuel: Hydrochloric Acid
Rated Capacity: 10,000 gal/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCPH ATI 4943 / PTO 0
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.26 lb/hr[1]
Authority for Requirement: LCPH ATI 4943 / PTO 0

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.26 lb/hr[1]
Authority for Requirement: LCPH ATI 4943 / PTO 0
567 IAC 23.3(2)"a"(2)
LCO 10.9(1)"a"

[1]It is assumed that PM is equal to PM10.

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

Control Device:
A scrubber shall be installed to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4943 / PTO 0

NSPS and NESHAP Applicability:
This unit is not subject to New Source Performance Standards.
This unit is not subject to National Emission Standards for Hazardous Air Pollutants at this time.
Authority for Requirement: LCPH ATI 4943 / PTO 0

Operating Limits:
Fresh water flow to the scrubber shall be maintained at 3 gpm.
Authority for Requirement: LCPH ATI 4943 / PTO 0

Operating Condition Monitoring and Recordkeeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Record the fresh water flow to the scrubber on a daily basis.
Monitor and record the pressure differential across the packed tower scrubber on a daily basis.
Records of all maintenance and repair completed on the control device.
Authority for Requirement: LCPH ATI 4943 / PTO 0

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

Stack Height (ft, from ground): 24
Discharge Style: Vertical, unobstructed
Stack Opening (inches, diameter): 16
Exhaust Temparture (°F): 65
Exhaust Flowrate (scfm): 300
Authority for Requirement: LCPH ATI 4943 / PTO 0

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

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.
Stack testing is not required at this time.
Opacity Monitoring:

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-522, SEP-539
Process Area: COGENERATION

Table Co-gen 35. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-522	EU-522	Co-gen Turbine Lube Oil Tanks 1-5	Oil	19,800 gal/hr	CE-522	Precipitator
SEP-539	EU-539	Co-gen Turbine Lube Oil Tank No. 6	Oil	2810 gallons	CE-539	Precipitator

Applicable Requirements

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

Table Co-gen 36. Emission Limits.

EP	EU	Opacity	Permit #
SEP-522	EU-522	10%	LCPH ATI 4092 / PTO 4035
SEP-539	EU-539	10%	LCPH ATI 4093 / PTO 4293

Table Co-gen 37. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-522 SEP-539	EU-522 EU-539	Opacity	20%	LCO 10.7
		PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"

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

Control Device:
A Smog-Hog Air Cleaning System (SH-10-PE-XB for SEP-539) shall be used to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4092 / PTO 4035
LCPH ATI 4093 / PTO 4293

Operating Limits:
The oil tank SEP-539 shall not exceed 2810 gallons.
Authority for Requirement: LCPH ATI 4093 / PTO 4293

Operating Condition Monitoring and Recordkeeping:
A log of operation shall be maintained for the operation of SEP-539.
Amount of oil consumed tracked on a 12-month rolling total.
All monitors shall be easily accessible to air pollution personnel.
All records as required by this permit shall be kept on site for a minimum of five (5) years and shall be available for inspection by the Linn County AQD and other federal or state air pollution regulatory agencies and/or their authorized representatives.
Authority for Requirement: LCPH ATI 4093 / PTO 4293

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

The emission point characteristics below apply to SEP-539.
Stack Height, (ft, from the ground): 20
Discharge Style: Horizontal
Stack Opening, (inches, diameter): 12
Exhaust Temperature (°F): 110
Exhaust Flow Rate (acfm): 150
Authority for Requirement: LCPH ATI 4093 / PTO 4293

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

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

Stack testing is not required at this time.

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-530
Process Area: COGENERATION

Table Co-gen 38. Emission Point Description.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity
SEP-530	EU-530A	Co-Gen Boiler No. 5	Coal	1500 MMBtu/hr
SEP-530	EU-530AN	Co-Gen Boiler No. 5	Natural Gas	0.28 MMCF/hr
SEP-530	EU-530AF	Co-Gen Boiler No. 5	Fuel Oil	

Table Co-gen 39. Associated Equipment.

EP	EU	CE ID	CE Description	ME ID
SEP-530	EU-530A	CE-530A CE-530B CE-530C	Baghouse Selective Non-Catalytic Reduction Limestone Injection	ME-530A, ME-530B, ME-530C, ME-530D
SEP-530	EU-530AN	CE-530A	Baghouse	ME-530A, ME-530B, ME-530C, ME-530D

Applicable Requirements

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

Table Co-gen 40. Opacity Emission Limits.

EP	Opacity	Authority for Requirement
SEP-530	20%, 6-minute average[1] except for one 6-minute period per hour of not more than 27%	Iowa DNR PSD Permit #98-A-507-P2 40 CFR 60.43(f) Subpart Db 40 CFR 60.46b(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)
SEP-530	20%	LCPH ATI 5096 / PTO 5045 LCO 10.7

Table Co-gen 41. Particulate Matter Emission Limits.

EP	Particulate Matter	PM-10[3]	Authority for Requirement
SEP-530	0.015 lb/MMBtu[2]	0.03 lb/MMBtu[2]	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045
SEP-530	22 ng/J, 0.051 lb/MMBtu		Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045 40 CFR 60.43b(a)(1) Subpart Db 40 CFR 60.46b(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Table Co-gen 42. Sulfur Dioxide (SO_2) Emission Limits.

EP	Sulfur Dioxide (SO_2)	Authority for Requirement
SEP-530	0.36 lb/MMBtu[4], 92% reduction[5]	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045
SEP-530	674.88 lb/hr [2,6,7]	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)
SEP-530	1.2 lb/MMBtu 92% reduction of equivalent inlet SO_2 rate[5], 30-day rolling average	40 CFR 60.42b(a), (e), (g), Subpart Db 40 CFR 60.45b(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)
SEP-530	1.5 lb/MMBtu when burning liquid fuel	LCO 10.12(1)"b"
SEP-530	500 ppmv	567 IAC 23.3(3)"e" LCO 10.12(2)

Table Co-gen 43. Nitrogen Oxides Emission Limits.

EP	NO_x	Authority for Requirement
SEP-530	0.07 lb/MMBtu[8,9]	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045
SEP-530	260 ng/J, 0.6 lb/MMBtu,[10] 30-day rolling average	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045 40 CFR 60.44b(a)3 Subpart Db 40 CFR 60.44b(h-i) Subpart Db 40 CFR 60.46(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)
SEP-530	86 ng/J, 0.2 lb/MMBtu,[10] 30-day rolling average	40 CFR 60.44b(a)1 Subpart Db 40 CFR 60.44b(h-i) Subpart Db 40 CFR 60.46b(a) Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Table Co-gen 44. Volatile Organic Compounds (VOC) and Carbon Monoxide (CO) Emission Limits.

EP	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Authority for Requirement
SEP-530	0.0072 lb/MMBtu[2]	0.15 lb/MMBtu[2]	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045

Table Co-gen 45. Other Emission Limits.

EP	Fluorides	Lead	Authority for Requirement
SEP-530	0.00124	0.000228	Iowa DNR PSD Permit #98-A-507-P2

	lb/MMBtu[2]	lb/MMBtu[11]	LCPH ATI 5096 / PTO 5045

[1]Opacity and particulate matter standards apply at all times except periods of startup, shutdown, or malfunction.
[2]Standard is expressed as the average of 3 runs.
[3]All particulate matter emissions after the baghouse were assumed to be PM10 for dispersion modeling purposes.
[4]This standard is a 30-day rolling average that includes periods of startup, shutdown, and malfunction.
[5]This reduction is in the equivalent inlet SO_2 emission rate. The equivalent inlet SO_2 emission rate means the stack emissions (on a lb/MMBtu heat input basis) that would result from the combustion of "as fired" fuels in the boiler without SO_2 absorption, assuming 100% conversion of sulfur in the fuels to SO_2.
[6]Emission rate used to demonstrate compliance with the National Ambient Air Quality Standards (NAAQS).
[7]SO_2 emission limit is determined by the following formula:
$E_s=(K_aH_a + K_bH_b)/(H_a + H_b)$
Where: E_s is the SO_2 emission limit (in either ng/J or lb/MMBtu heat input)
K_a is 520 ng/J or 1.2 lb/MMBtu
K_b is 340 ng/J or 0.8 lb/MMBtu
H_a is the heat input from the combustion of coal (in either J or MMBtu)
H_b is the heat input from the combustion of oil (in either J or MMBtu)
Only the heat input supplied from the combustion of coal or oil is counted. No credit is provided for the heat input from the combustion of natural gas, wood, municipal-type solids waste, or other fuels or heat input from other sources such as gas turbines, internal combustion engines, kilns, etc. This limit is a 30-day rolling average and applies at all times including periods of startup, shutdown, and malfunction.
[8]This standard is a 30-day rolling average that includes all periods of operation except for cold startup periods. A cold startup period is defined as that period of time when a coal-fired co-gen boiler is proceeding to increase the temperature in the lower combustor from less than 400°F to at least 1500°F. This period shall last no more than forty-eight (48) hours and NO_x emissions data from this period shall be excluded when determining compliance with the permitted emission limit. Ammonia injection shall begin as soon as the lower combustor temperature reaches 1500°F and the cold startup period will end at this time. All data from cold startup periods after the first fourty-eight (48) hours, or while ammonia is injected in the boiler, will be included in determining compliance with the optimized limit.
[9]This emission limit is waived for the specific SNCR optimization study activity as detailed in "Operating Limits" not to extend more than 380 days after the Initial Compliance Demonstration of "Initial Performance Testing Requirements."
[10]Per 40 CFR 60.44b(h) and 40 CFR 60.44(i), the limit is a 30-day rolling average that includes periods of startup, shutdown, and malfunction.
[11]This standard is a three (3) month average.

Operational Limits & Requirements

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

Control Device:
Limestone injection shall be used to control SO2 emissions, SNCR shall be used to reduce NO_x emissions, a baghouse shall be used to control particulate matter, and combustion controls shall be used to reduce VOC and CO emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 5096 / PTO 5045

30-Day Rolling NO_x and SO_2 Emission Limits Compliance:
The initial performance tests using a Continuous Emission Monitoring System (CEMS) shall be conducted over the first 30 consecutive boiler operating days. The first day of these tests shall be completed within 30 days after achieving maximum production rate but no later than 180 days after initial startup of the facility.

For the initial 30-day rolling average compliance test, NO_x and SO_2 from the boiler shall be monitored for 30 consecutive boiler operating days. The 30-day average emission limit shall be calculated as the average of all valid hourly emission rate data recorded by the CEMS during the 30-day test period.

The owner/operator shall use all valid hourly stack emission data recorded by the SO_2 CEM in conjunction with the corresponding gross heat input rate obtained through daily FSA to calculate each hourly emissions of SO_2 in pounds per hour (lb/hr). The lb/hr emission data shall be incorporated into the quarterly report submitted to the Department.
Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI 5096 / PTO 5045

30-Day Rolling SO_2 Percent Reduction Compliance:
If only coal is combusted, the procedures specified in §60.45b(c)(2) shall apply.
If coal is combusted with other fuels, the procedures specified in §60.45b(c)(3) shall apply.

The initial performance tests using a Continuous Emission Monitoring System (CEMS) and a Fuel Sampling Analysis (FSA) system shall be conducted over the first 30 successive boiler operating days. The first day of tests shall be completed within 30 days after achieving maximum production rate but no later than 180 days after initial startup of the facility. Performance tests using CEMS cannot be conducted until each CEMS is certified and accepted by the IDNR for such purposes.
The owner shall use all valid hourly stack emissions data recorded by the CEMS in conjunction with the corresponding equivalent inlet SO_2 rate to calculate each hourly percent SO_2 reduction achieved by each boiler. The 30-day average percent SO_2 reduction shall be calculated as the average of all valid hourly percent reduction values collected during 30 consecutive boiler operating days during which the 92 percent reduction requirements applies. All valid emission data, including valid data collected during periods of startup, shutdown and malfunction, shall be used in the calculation.

A boiler operating day means any 24-hour period beginning at 7:00 am and continuing to 7:00 am the following day, during which any amount of fuel is combusted in the boiler. It is not necessary for fuel to be combusted continuously for the entire 24-hour period to qualify as a boiler operating day. Valid data includes any data collected during any period of fuel combustion and at all operating times.
Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI 5096 / PTO 5045

NSPS and NESHAP Applicability:
This emission unit is subject to Subparts A (General Provisions, 40 CFR §60.1 – 40 CFR §60.19) and Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units 40 CFR §60.40b-40 CFR §60.49b) of the New Source Performance Standards (NSPS).

This emission unit is subject to Subparts A (General Provisions, 40 CFR §63.1 – 40 CFR §63.15) and DDDDD (National Emission Standard for Industrial, Commercial, and Institutional Boilers and Process Heaters) of the National Emission Standards for Hazardous Air Pollutants (NESHAP).
Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI 5096 / PTO 5045

Operating Limits:
Operating limits for this emission source are:
The fuel combusted shall be limited to gas (for startup), oil (for startup), coal and less than 20% of blends of alternative fuels.
The alternative fuels combusted are limited to petroleum coke, tire derived fuel (TDF), wood derived fuels, corn gluten fee, corn germ, dried wastewater treatment biomass (from ADM's Cedar Rapids and Clinton facilities only), oat hulls, shell corn, seed corn, and corn screenings. The owner or operator must receive an approval from the IDNR central office before a fuel other than specified above is combusted in the boilers. The IDNR shall reevaluate the fuel and may impose best available control technology (BACT) emission standards (including a percent reduction requirement) for the fuel type (or combination) in question. Other PSD-related procedures (e.g., dispersion modeling studies) may also be required.
The owner/operator shall conduct a study on the boiler to determine the optimized performance of the SNCR system within one year after the startup date. The Department shall review the optimization study and revise the NO_x emission limit as the Department determines is appropriate so as to reflect optimized performance of the SNCR system as indicated by the SNCR percent NO_x reduction for the various operating conditions tested. The Department will include a margin of up to twenty percent (20%) to provide for excess emissions over an averaging period adequate to reflect the variability of the operating parameters the Department determines have the dominant impact on emission rates (it is anticipated that this adjustment will not exceed the "provisionally guaranteed" 0.12 lb/MMBtu). Prior to initiating the study, ADM shall submit a detailed study plan for the IDNR approval including the specific dates of the optimization study and the boiler operation conditions to be tested. The optimization study shall monitor and record, but not limited to, the following items:
Reagent injection rates
Boiler NO_x prior to injection
Reagent injection to boiler NO_x ratios

Boiler temperature
CO, SO_2, and chlorine levels prior to injection
Boiler load in MMBtu/hr and percent of rated capacity
Steam generation rate
Bed calcium to sulfur ratios
Fuel type, percent ash and percent sulfur
NO_x emission rate
SNCR NO_x emission reduction in percent
Ammonia emission rates, and
Opacity
This information shall be collected or calculated hourly during the study unless otherwise specified in the detailed study plan to be submitted by ADM as approved by the IDNR. In addition, at least three separate visible emission tests shall be conducted for each set of operation/injection condition identified for the study.
Within one year after beginning operation, the optimization study data and report shall be submitted to the IDNR.
ADM shall submit a summary of study activities with the Quarterly CEM reports covering the same time period as the CEM report.
The owner shall furnish the IDNR written reports as follows:
Initial Compliance Demonstration Reports required in "Initial Performance Testing Requirements."
CEMS performance evaluation.
The maximum heat input capacity data from the demonstration of the boiler's maximum heat input capacity.
The owner shall submit a written emissions report to the IDNR central office each calendar quarter. Reports shall be submitted to the IDNR postmarked no later than 30 days after the end of the calendar quarter starting with the quarter in which initial start-up of the boiler occurs. The report shall include the following:
Calendar dates covered by the report
Dates and hours of startup, shutdown or malfunction
Type, quality and quantity of fuel combusted
Each hourly SO_2 and NO_x emissions, a summary of excess opacity emissions and diluent gas emission rate as well as each operating day's 30-day average SO_2 and NO_x emission rate and percent SO_2 reduction determined during the reporting period.
Each instance of excess emissions and of non-standard or manual data collection and how those data were collected, where data was excluded, exceeded full span of CEMS or was not available for any other reason, together with reasons for each of these instances of noncompliance and a description of the corrective actions taken, and any statistics required pursant to 40 CFR 60.49b(m).
"F" factor, method of determination and fuel description
Description of any modification to the CEMS and its potential effect on CEMS performance
Results of daily CEMS drift test and quarterly accuracy assessments and related data as required under 40 CFR Part 60, Appendix F.
Coal sampling and analysis results
Lead (Pb) quarterly test results.

The owner or operator shall record the amounts of each fuel combusted during each day and calculate a new annual capacity factor for each fuel type at the end of each calendar month as specified in 40 CFR §60.49b(d).
The owner or operator shall record the amounts of each fuel combusted during each day and calculate the annual capacity factor individually according to 40 CFR §60.49b(d).
The owner or operator shall record the net actual electrical output to any utility power distribution system for sale annually, calculated as an average over any three (3) calendar year period.
The owner or operator shall furnish the IDNR with final detailed plans and specifications for all emission control equipment selected by the owner to meet the emission limits contained in "Emission Limits." This information shall be submitted to the IDNR at least 30 days in advance of construction of any control equipment.
Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI 5096 / PTO 5045

Operating Condition Monitoring and Recordkeeping:
All records as required by this permit shall be kept on site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives. These records shall show the following:
The owner or operator shall maintain a record of periods of startup, shutdown, or malfunction. Operating hours shall be averaged on a 12-month basis rolled over monthly.
The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate a new annual capacity factor for each fuel type at the end of each calendar month as specified in 40 CFR §60.49b(d).
The owner or operator shall maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually according to 40 CFR 60.49b(d).
The owner or operator shall maintain records of the net actual electrical output to any utility power distribution system for sale annually, calculated as an average over any three (3) calendar year period.
Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI 5096 / PTO 5045
Recordkeeping for NESHAP Subpart DDDDDshall be done according to 40 CFR §63.7555 and 40 CFR §63.7560.
Reporting for NESHAP Subpart DDDDD shall be done according to 40 CFR §63.7545 and 40 CFR §63.7550.
Authority for Requirement: LCPH ATI 5096 / PTO 5045

Continuous Emission Monitoring and Fuel Sampling Analysis:
A. SO_2 and NO_x
The owner shall continuously demonstrate compliance with the SO_2 and NO_x emission limitations and SO_2 percent reduction requirements of this permit through the use of a continuous emission monitoring system (CEMS) and a fuel sampling and analysis (FSA) system. These systems shall be installed, operating and calibrated prior to beginning the initial compliance demonstration set forth according to 40 CFR §60.13.
Compliance with the SO_2 and NO_x emission rate limitations and the SO_2 percent reduction requirements shall be calculated as the average of all valid hourly emission rate data and valid

hourly SO_2 percent reduction data for the 30 previous boiler operating days during which each standard applies. The owner shall calculate a new 30-day average at the end of each boiler operating day.

Unless otherwise approved by the Department, the selection of the CEMS span value (maximum data display output) for each parameter shall be those specified in 40 CFR part 60 Subpart Db.

In addition to the provisions of 40 CFR Part 60, Appendix B, the performance specifications applicable to the CEMS required by the permit shall include a data recovery requirement of 90% and shall meet precision and accuracy requirements of 10 percent and 10 percent of the applicable standard respective, unless otherwise specified in the permit. When the minimum data requirements of the permit cannot be obtained, the methods and procedures of 40 CFR §60.47b(c) and §60.48b(f) shall be employed by the owner to obtain the required data.

Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI 5096 / PTO 5045

A.1. 30-Day Rolling NO_x and SO_2 Emission Limit Compliance

The owner shall install, calibrate, operate, maintain, audit, and record the output from CEMS capable of measuring SO_2, NO_x, and the appropriate diluent gas (oxygen or carbon dioxide). The CEMS shall be installed, calibrated operated, maintained, and audited. Data shall be recorded in accordance with the provisions found at 40 CFR §60.13: Monitoring Requirements; 40 CFR Part 60, Appendix B, Performance Specifications 2 and 3: Specification and Test Procedures for SO_2, NO_x, and diluent CEMS; and 40 CFR Part 60, Appendix F: Quality Assurance Requirements for Gas CEMS Used for Compliance Determinations, as adopted by the Department by reference.

The CEMS shall be operated and data recorded during any period any fuel is combusted in the boiler. Hourly parts-per-million data recorded by the pollutant CEMS shall be converted to pound of pollutant per million BTU (lb/MMBTU) heat input using the equations and methodology specified in 40 CFR Part 60, Appendix A, Method 19 (as it appears in the July 1, 1997, Code of Federal Regulations). Hourly emission rate data shall be recorded and used by the owner/operator to calculate compliance with the applicable emission rates and percent reductions for the specified averaging times.

The owner shall successfully complete SO_2 and NO_x CEMS performance evaluations including relative accuracy and calibration drift assessment evaluations prior to beginning the initial compliance demonstration.

The owner shall notify the IDNR central office at least 30 days in advance of conducting any relative accuracy test.

Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI 5096 / PTO 5045

A.2. SO_2 Percent Reduction Compliance

The owner shall install, calibrate, operate, and maintain a fuel sampling and analysis (FSA) system to collect "as fired" fuel data. The FSA system shall meet or exceed the design and performance specifications set forth in 40 CFR Part 60, Appendix A, Method 19 (incorporating by reference of ASTM Method D2234-76, et al).

Analyses shall be performed for weight percent sulfur (%S) and gross heat value (GHV, expressed in BTU/lb-fuel). The owner may develop an in-house fuel analysis program or may send collected samples to a laboratory for analysis. In either case, the analytical results shall be available to the proposed boiler operator within 72 hours of the sample collection time.

The "as-fired" fuel data shall be used to determine the equivalent hourly average SO_2 inlet rate to the boiler, and shall be used in conjunction with the SO_2 CEMS emission rate data to determine compliance with the SO_2 30-day rolling percent reduction limit.
The owner shall calculate an equivalent SO_2 rate for each bunker using the weight percent sulfur and the gross heating value obtained through daily FSA, using the equation specified in 40 CFR Pat 60, Appendix A, Method 19, Section 5.3.2, Equations 19-24.
If the equivalent inlet SO_2 rates for fuel contained in each day bunker which feeds to a single boiler differ by 0.2 lbs SO_2/MMBTU heat input or less, the arithmetic average of the two equivalent SO_2 inlet rates shall be used as the "equivalent hourly average SO_2 inlet rate" for each hourly percent reduction calculation during the boiler operation day. Otherwise, the owner shall: use the smaller of the two equivalent SO_2 inlet rates as the "equivalent hourly average SO_2 inlet rate" for each hourly percent reduction calculation during the boiler operating day, or calculate an "equivalent hourly average SO_2 inlet rate" for each hour of operation using the following heat input weighted equation.

Equivalent hourly average SO_2:

$$\text{Inlet Rate} = \frac{W_1 \cdot S_1\% + W_2 \cdot S_2\%}{W_1 \cdot GHV_1 + W_2 \cdot GHV_2} \times K$$

W_1 = Tons of fuel fed to first of paired day bunkers during hour
W_2 = Tons of fuel fed to second of paired day bunkers during hour
$S_1\%$ = Weight percent sulfur of fuel contained in first bunker
$S_2\%$ = Weight percent sulfur of fuel contained in second bunker
GHV_1 = Gross heating value of fuel contained in first bunker
GHV_2 = Gross heating value of fuel contained in second bunker
K = 20,000 (lb-BTU) / (% - MMBTU)

Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P1
LCPH ATI 3737 / PTO 4740

B. Opacity

A continuous monitoring system for measuring the opacity of emissions discharged into the atmosphere from the boiler shall be operated, and maintained during all periods of operation of the boiler except for continuous monitoring system breakdowns and repairs. Operation shall be in conformance with 40 CFR §60.48b that includes recording the output of the system. Reporting and recordkeeping requirements shall be in conformance with 40 CFR §60.49b that shall include filing a quarterly report of excess emissions as outlined therein.

Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI 5095 / PTO 5045

C. Lead (Pb)

Fuel samples shall be analyzed for lead (Pb) and the results submitted in writing to the DNR on a quarterly basis. Fuel sampling shall be conducted as specified under "SO_2 Percent Reduction Compliance." Sample analysis for Lead (Pb) shall be performed as specified in SW-846 Method 6010. The quarterly testing results shall be reported as specified under "Operating Limits."

Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI5096 / PTO 5045

NSPS General Requirements:

This boiler is subject to 40 CFR 60 NSPS Subpart Db, Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units. The requirements for this subpart are listed in Appendix A.

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. 40 CFR 60.7(b)

The permittee shall submit an excess emissions and monitoring systems performance report to the Department and Administrator in accordance with 40 CFR 60.7(c). The summary report form shall contain the information and format required in 40 CFR 60.7(d).

Notwithstanding the frequency of reporting requirements in the prior permit conditions, the permittee may reduce the frequency of reporting of excess emissions and monitoring system performance reports pursuant to 40 CFR 60.7(e).

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12
Authority for Requirement: 567 IAC 23.1(2)

Existing Large Solid Fuel Subcategory
These emissions units are of the source type regulated by the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters (567 IAC 23.1(4)"dd", 40 CFR Part 63, Subpart DDDDD). On July 30, 2007, the DC Circuit Court vacated this entire standard. Since the standard has been vacated, the units may be subject to the requirements of section 112(j) of the Clean Air Act. Section 112(j) requires the facility to submit an application addressing the control of HAP emissions from these units and also requires that the MACT (Maximum Achievable Control Technology) be incorporated into the facility's Title V operating permit. The Iowa DNR - Air Quality Bureau is currently developing a procedure to implement Section 112(j) requirements, if applicable, for units that were subject to the vacated rule. If the facility is required to modify the units or control equipment to comply with section 112(j), then the facility shall submit an application to modify the required construction permit.

Authority for Requirement: 40 CFR 63.52; 567 IAC 23.1(4)"b"(2)

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

Stack Height, (ft, from the ground): 412.5
Discharge Style: Unobstructed, vertical
Stack Opening, (inches, diameter): 144
Exhaust Temperature (°F): 310
Exhaust Flow Rate (scfm): 320,400
Authority for Requirement: Iowa DNR PSD Permit #98-A-507-P2
LCPH ATI 5096 / PTO 5045

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

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first year of permit term
2nd Stack Test to be Completed by – after 2.5 years but before 3.5 years

Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Volatile Organic Compounds (VOC)
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 25A (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Carbon Monoxide (CO)
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 10 (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Lead
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 12 (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Fluorides
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 13B (40 CFR 60) Appendix A
Authority for Requirement – 567 IAC 22.108(3)

Continuous Emissions Monitoring:

Pollutant:	**Sulfur Dioxide (SO_2)**
Continuous Emissions Monitor ID:	ME-530A
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	August 6, 2002
Ongoing System Calibration/Quality Assurance:	40 CFR 60 Appendix F
Reporting & Record keeping:	40 CFR 60 Appendix A and B
Authority for Requirement:	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045 40 CFR 60.47b Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Pollutant:	**Nitrogen Oxides (NO_x)**
Continuous Emissions Monitor ID:	ME-530B
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	August 6, 2002
Ongoing System Calibration/Quality Assurance:	40 CFR 60 Appendix F
Reporting & Record keeping:	40 CFR 60 Appendix A and B
Authority for Requirement:	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045 40 CFR 60.48b Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Pollutant:	**Opacity**
Continuous Emissions Monitor ID:	ME-530C
Operational Specifications:	40 CFR 60.13 and 40 CFR 60.45
Date of Initial System Calibration & Quality Assurance:	April 9, 2005
Ongoing System Calibration/Quality Assurance:	40 CFR 60
Reporting & Record keeping:	40 CFR 60
Authority for Requirement:	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045 40 CFR 60.48b Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

Other Parameters:

Pollutant:	**Diluent O_2**
Continuous Emissions Monitor ID:	ME-530D
Operational Specifications:	40 CFR 60
Date of Initial System Calibration & Quality Assurance:	August 6, 2002
Ongoing System Calibration/Quality Assurance:	40 CFR 60 Appendix F
Reporting & Record keeping:	40 CFR 60 Appendix A and B
Authority for Requirement:	Iowa DNR PSD Permit #98-A-507-P2 LCPH ATI 5096 / PTO 5045 40 CFR 60.47b, 60.48b Subpart Db 567 IAC 23.1(2)"ccc" LCO 10.9(2)"a"(55)

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)

Refer to Appendix I, Agency O&M Plans, for the complete agency operation and maintenance plans.

Emission Point ID Number: SEP-537
Process Area: COGENERATION

Associated Equipment
Associated Emission Unit ID Numbers: EU-537
Emissions Control Equipment ID Number: CE-537
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU-537
Emission Unit Description: Coal Bunker
Raw Material/Fuel: Coal
Rated Capacity: 600 ton/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): 10%
Authority for Requirement: Iowa DNR PSD Permit #98-A-514P
LCPH ATI 3730 / PTO 4734

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCO 10.7
40 CFR 60.252(c) Subpart Y
567 IAC 23.1(2)"v"
LCO 10.9(2)"a"(22)

Pollutant: PM-10
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: Iowa DNR PSD Permit#98-A-514P
LCPH ATI 3730 / PTO 4734

Pollutant: Particulate Matter
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: LCPH ATI 3730 / PTO 4734

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"(2)
LCO 10.9(1)"a"

Operational Limits & Requirements

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

Control Device:

A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 3730 / PTO 4734

NSPS and NESHAP Applicability:

This emission unit is subject to 40 CFR 60 Subpart Y – Standards of Performance for Coal Preparation Plants.
This emission unit is subject to 40 CFR 60 Subpart A – General Provisions.
This emission unit is not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) at this time.
Authority for Requirement: LCPH ATI 3730 / PTO 4734

NSPS Requirements:

These units are subject to 40 CFR 60 NSPS Subpart Y, Standards of Performance for Coal Preparation Plants. The requirements for this subpart are listed in Appendix C.

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c)

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

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

Stack Height, (ft, from the ground): 195
Discharge Style: Vertical, unobstructed
Stack Opening, (diameter, feet): 2
Exhaust Temperature (°F): 70
Exhaust Flow Rate (scfm): 25,000
Authority for Requirement: Iowa DNR PSD Permit #98-A-514P
LCPH ATI 3730 / PTO 4734

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

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

Stack Testing:
Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

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

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

If an opacity >10 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to

retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-009
Process Area: BULK CHEMICALS

Associated Equipment
Associated Emission Unit ID Numbers: EU-9
Emissions Control Equipment ID Number: CE-9
Emissions Control Equipment Description: Scrubber

Emission Unit vented through this Emission Point: EU-9
Emission Unit Description: Soda Ash Slur O Lyzer
Raw Material/Fuel: Soda Ash
Rated Capacity: 16,250 lb/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCPH ATI 4448 / PTO 4700
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.1 gr/dscf, 0.89 lb/hr, 3.92 tpy
Authority for Requirement: LCPH ATI 4448 / PTO 4700

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.89 lb/hr, 3.92 tpy
Authority for Requirement: LCPH ATI 4448 / PTO 4700
567 IAC 23.3(2)"a"(2)
LCO 10.9(1)"a"

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

Control Device:
A Venturi scrubber shall be used to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in

"Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4448 / PTO 4700

Operating Limits:
Water feed rate to the scrubber shall be maintained at a level not less than 17.4 gpm
Maximum capacity: 16,250 lb/hr
Authority for Requirement: LCPH ATI 4448 / PTO 4700

Operating Condition Monitoring and Recordkeeping:
All monitors shall be easily accessible to air pollution personnel. All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County AQD and other federal or state air pollution regulatory agencies and/or their authorized representatives.
A log of operation shall be maintained for the operation of the above listed unit.
Weekly pressure drop readings across scrubber.
Weekly recirculation water flow rates (gpm) to the scrubber.
Records of all maintenance and repair completed to the control device.
Authority for Requirement: LCPH ATI 4448 / PTO 4700

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

Stack Height, (ft, from the ground): 20
Discharge Style: Vertical
Stack Opening, (inches, diameter): 12
Exhaust Temperature (°F): 130-150
Exhaust Flow Rate (acfm): 1200
Authority for Requirement: LCPH ATI 4448 / PTO 4700

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

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-020
Process Area: BULK CHEMICALS

Associated Equipment
Associated Emission Unit ID Numbers: EU-20
Emissions Control Equipment ID Number: CE-20
Emissions Control Equipment Description: Scrubber

Emission Unit vented through this Emission Point: EU-20
Emission Unit Description: Hydrochloric Acid Storage Vent
Raw Material/Fuel: Hydrochloric Acid
Rated Capacity: 34,000 gal/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 20%
Authority for Requirement: LCPH ATI 2107 / PTO 2025
LCO 10.7

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: LCPH ATI 2107 / PTO 2025
567 IAC 23.3(2)"a"(2)
LCO 10.9(1)"a"

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

Stack Testing
Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-033
Process Area: BULK CHEMICALS

Associated Equipment

Associated Emission Unit ID Numbers: EU-33
Emissions Control Equipment ID Number: CE-33
Emissions Control Equipment Description: Bin Vent Filter

Emission Unit vented through this Emission Point: EU-33
Emission Unit Description: Bulk Precoat System
Raw Material/Fuel: Diatomaceous Earth
Rated Capacity: 33,000 lbs/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): 20%
Authority for Requirement: LCPH ATI 3981 / PTO 4034
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.1 gr/scf, 0.86 lb/hr, 3.75 tpy
Authority for Requirement: LCPH ATI 3981 / PTO 4034

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf, 0.86 lb/hr, 3.75 tpy
Authority for Requirement: LCPH ATI 3981 / PTO 4034
567 IAC 23.3(2)"a"(2)
LCO 10.9(1)"a"

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

Operating Limits:
Maximum equipment design rate: 33,000 lbs/hr
Exhaust airflow rate: 1000 scfm
Authority for Requirement: LCPH ATI 3981 / PTO 4034

Monitoring Requirements:

The following information shall be monitored:
Daily pressure drop readings
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 3981 / PTO 4034

Recordkeeping Requirements:
A logbook of operation shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than five years.
Daily pressure drop readings
Records of all maintenance and repair completed on the control device
These records shall be available on site for viewing by air pollution control personnel.
Authority for Requirement: LCPH ATI 3981 / PTO 4034

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

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

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

shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-046
Process Area: BULK CHEMICALS

Associated Equipment
Associated Emission Unit ID Numbers: EU-46
Emissions Control Equipment ID Number: CE-46
Emissions Control Equipment Description: Scrubber

Emission Unit vented through this Emission Point: EU-46
Emission Unit Description: Sulfur Burning System
Raw Material/Fuel: Molten Sulfur
Rated Capacity: 833.33 lb/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 10%
Authority for Requirement: LCPH ATI 3950 / PTO 4019

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.90 lb/hr, 3.94 tpy
Authority for Requirement: LCPH ATI 3950 / PTO 4019

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

Control Device:
Two absorption towers will be employed as the primary mechanism responsible for the transference of the gaseous SO_2 into the steeping water solution. The absorption towers are inherent to the process and for all practicable purposes are not considered air pollution control devices. The efficiency of the two absorption towers will have a direct effect on the associated SO_2 emissions, hence these towers will be conditioned as control equipment. All appropriate probes and gauges needed to measure the parameters outlined in "Monitoring Requirements" shall be installed and maintained in good operating condition.
Authority for Requirement: LCPH ATI 3950 / PTO 4019

Operating Limits:
Minimum water flow rate through the absorption towers:
Primary Tower = 300 gal/hr
Secondary Tower = 75 gal/hr
The sulfur burner shall be limited to a maximum process rate of 10 tons of sulfur per day.
The maximum airflow rate of the variable speed fan shall be 750 acfm. Any increase shall be considered a modification and will require a new authorization to install permit.
Authority for Requirement: LCPH ATI 3950 / PTO 4019

Monitoring Requirements:
The following information shall be monitored:
Daily pressure drop readings on each of the two absorption towers
Daily water flow to each of the two absorption towers
Process rate for sulfur burner
All monitors shall be easily accessible to air pollution personnel.
Authority for Requirement: LCPH ATI 3950 / PTO 4019

Recordkeeping Requirements:
A logbook of operations shall be maintained for this source. The following information shall be recorded and kept on site for a period of no less than five years.
Maintain a daily process rate log for sulfur burning
Daily pressure drop readings for two absorption towers
Daily water flow rate for two absorption towers (gal/hr)
Record of all maintenance and repair on the absorption towers
Copies of test results shall be retained until a new approved representative test is conducted or for five years, whichever is longer.
NOTE: *The operation of an audible low water flow alarm system for the scrubber units can be operated in lieu of daily logging of the water flow rates.*
These records shall be available on site for viewing by air quality personnel at all times.
Authority for Requirement: LCPH ATI 3950 / PTO 4019

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

Stack Testing:

Pollutant – Particulate Matter
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Iowa Compliance Sampling Manual
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – PM-10
1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 201A with 202 (40 CFR 51) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Sulfur Dioxide (SO_2)

1st Stack Test to be Completed by – within first two years of permit term
Test Method – Method 6C (40 CFR 60) or approved alternative
Authority for Requirement – 567 IAC 22.108(3)

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

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-165
Process Area: BULK CHEMICALS

Associated Equipment
Associated Emission Unit ID Numbers: EU-165

Emission Unit vented through this Emission Point: EU-165
Emission Unit Description: Plate Wash Tanks
Raw Material/Fuel: Water and Rydlyme
Rated Capacity: 1000 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): 20%
Authority for Requirement: LCPH ATI 4283 / PTO 4336
LCO 10.7

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

Operating Limits:
The maximum operating capacity of this device is:
Tank Capacity: 1000 gallons each
Exhaust Airflow Rate: 9500 acfm
Authority for Requirement: LCPH ATI 4283 / PTO 4336

Compliance Monitoring:
The following information shall be monitored:
Airflow from this source shall not exceed 9500 acfm. Any increase in airflow would be considered a modification and would necessitate a new Authorization to Install permit.
The total usage of cleaning solvents that contain VOCs or VHAPs from this source shall not exceed a yearly total of 2000 gallons calculated on a 12-month rolling average. The maximum VOC density (content) of the cleaning material shall not exceed 9 pounds per gallon. Cleaning solvents that do not contain regulated pollutants do not need to be recorded.
Authority for Requirement: LCPH ATI 4283 / PTO 4336

Recordkeeping Requirements:
A log of operation shall be maintained for the facility. The following information shall be recorded and kept on site for a period of no less than five years.
The total usage of cleaning solvents that contain VOCs or VHAPs from this source shall not exceed a yearly total of 2000 gallons calculated on a 12-month rolling average. The maximum VOC density (content) of the cleaning material shall not exceed 9 pounds per gallon. Cleaning solvents that do not contain regulated pollutants do not need to be recorded.
MSDSs or other documentation showing the VOC content of the cleaning solvents used must be kept with these records.
These records shall be available for viewing by Air Pollution Control personnel upon request.
Authority for Requirement: LCPH ATI 4283 / PTO 4336

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

Stack testing is not required.

Opacity monitoring is not required.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-240, SEP-242, SEP-243, SEP-244, SEP-245, SEP-246, SEP-247 SEP-248, SEP-249

Process Area: WASTE TREATMENT

Table Waste Treatment-1. Associated Equipment.

EP	EU	EU Description	Raw Material/Fuel	Rated Capacity
SEP-240	EU-240	Equalization Basins	Wastewater	432,000 gal/hr
SEP-242	EU-242	West Aeration Basin	Wastewater	241,560 gal/hr
SEP-243	EU-243	East Aeration Basin	Wastewater	241,560 gal/hr
SEP-244	EU-244	Biototron #1	Wastewater	63,420 gal/hr
SEP-245	EU-245	Biototron #2	Wastewater	63,420 gal/hr
SEP-246	EU-246	Biototron #3	Wastewater	63,420 gal/hr
SEP-247	EU-247	East Clarifier	Wastewater	114,720 gal/hr
SEP-248	EU-248	Center Clarifier	Wastewater	114,720 gal/hr
SEP-249	EU-249	West Clarifier	Wastewater	114,720 gal/hr

Applicable Requirements

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

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

Table Waste Treatment-2. Emission Limits.

EP	EU	VOC [1]	LCPH Permit #
SEP-240	EU-240	0.339 lb/hr, 1.486 tpy	ATI 4843 / PTO 0
SEP-242	EU-242	2.677 lb/hr, 11.75 tpy	ATI 4845 / PTO 0
SEP-243	EU-243	2.677 lb/hr, 11.75 tpy	ATI 4846 / PTO 0
SEP-244	EU-244	0.184 lb/hr, 0.81 tpy	ATI 4847 / PTO 0
SEP-245	EU-245	0.184 lb/hr, 0.81 tpy	ATI 4848 / PTO 0
SEP-246	EU-246	0.184 lb/hr, 0.81 tpy	ATI 4849 / PTO 0
SEP-247	EU-247	0.151 lb/hr, 0.662 tpy	ATI 4850 / PTO 0
SEP-248	EU-248	0.151 lb/hr, 0.662 tpy	ATI 4851 / PTO 0
SEP-249	EU-249	0.151 lb/hr, 0.662 tpy	ATI 4852 / PTO 0

[1]Requested Limit per Consent Decree Housekeeping, Paragraph 39(b)

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

Operating Limits:
The equalization basin is limited to a flow rate of 7200 gpm.
Authority for Requirement: LCPH ATI 4843 / PTO 0

Operating Condition Monitoring & Recordkeeping:
All records as required by this permit shall be kept on site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Monitor and record the flow rate to the equalization basin on a weekly basis.
Authority for Requirement: LCPH ATI 4843 / PTO 0

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

Table Waste Treatment-3. Stack Characteristics.

			Stack Characteristics			
EP	**EU**	**LCPH Permit Numbers**	**Stack Height (feet, above ground)**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (acfm)**
SEP-240	EU-240	ATI 4843 / PTO 0	18	Vertical, unobstructed 60' x 120'	135	650
SEP-242	EU-242	ATI 4845 / PTO 0	5	Vertical, unobstructed 304' x 215'	95	325
SEP-243	EU-243	ATI 4846 / PTO 0	5	Vertical, unobstructed 304' x 215'	95	325
SEP-244	EU-244	ATI 4847 / PTO 0	18	Vertical, unobstructed 92'	95	7600
SEP-245	EU-245	ATI 4848 / PTO 0	18	Vertical, unobstructed 92'	95	7600
SEP-246	EU-246	ATI 4849 / PTO 0	18	Vertical, unobstructed 92'	95	7600
SEP-247	EU-247	ATI 4850 / PTO 0	3	Vertical, unobstructed 66'	80	Undetermined
SEP-248	EU-248	ATI 4851 / PTO 0	3	Vertical, unobstructed 66'	80	Undetermined
SEP-249	EU-249	ATI 4852 / PTO 0	3	Vertical, unobstructed 66'	80	Undetermined

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

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

Monitoring Requirements

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

Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-087, SEP-089
Process Area: BIOMASS PROCESSING

Table Biomass-1. Associated Equipment.

EP	EU	EU Description	Raw Material/Fuel	Rated Capacity
SEP-087	EU-87	Biosolids Dryer	Biosolids	4.2 ton/hr
SEP-089	EU-89	Biosolids Dryer	Biosolids	4.2 ton/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.

Table Biomass-2. Emission Limits.

EP	EU	SO_2	Permit #
SEP-087	EU-87	500 ppmv, 1.83 lb/hr	LCPH ATI 4608 / PTO 0
SEP-089	EU-89	500 ppmv, 1.83 lb/hr	LCPH ATI 4619 / PTO 0

Table Biomass-3. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-087 SEP-089	EU-087 EU-089	Opacity	20%	LCO 10.7
		PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"
		SO_2	500 ppmv	567 IAC 23.3(3)"e" LCO 10.12(2)

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

Operating Limits:
The biomass dryers, emission points 87 and 89, shall vent into the west aeration basin. Prior to exhausting into the aeration basin, emission from the dryer shall be controlled by a spray tower condenser and a liquid ring exhaust blower.
Authority for Requirement: LCPH ATI 4608 / PTO 0
LCPH ATI 4619 / PTO 0

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

Table Biomass-4. Stack Characteristics.

			Stack Characteristics			
EP	**EU**	**LCPH Permit Numbers**	**Stack Height (feet, above ground)**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (acfm)**
SEP-087	EU-87	ATI 4608 / PTO 0	Stack discharges at the bottom of the west aeration basin	4	130	368
SEP-089	EU-89	ATI 4619 / PTO 0	Stack discharges at the bottom of the west aeration basin	4	130	368

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

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

Stack testing is not required at this time.

Opacity monitoring is not required at this time.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-098, SEP-099, SEP-100
Process Area: BIOMASS PROCESSING

Table Biomass-5. Associated Equipment.

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity	CE ID	CE Description
SEP-098	EU-98	Biosolids Storage Bin #1	Dried Biosolids	1.25 ton/hr	CE-98	Baghouse
SEP-099	EU-99	Biosolids Storage Bin #2	Dried Biosolids	1.25 ton/hr	CE-99	Baghouse
SEP-100	EU-100	Biosolids Storage Bin #3	Dried Biosolids	1.25 ton/hr	CE-100	Baghouse

Applicable Requirements

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

Table Biomass-6. Emission Limits.

EP	EU	Opacity	PM / PM-10	Permit #
SEP-098	EU-98	20%	0.02 gr/dscf, 0.17 lb/hr	ATI 4620 / PTO 5013
SEP-099	EU-99	20%	0.02 gr/dscf, 0.17 lb/hr	ATI 4621 / PTO 5014
SEP-100	EU-100	20%	0.02 gr/dscf, 0.17 lb/hr	ATI 4622 / PTO 5015

Table Biomass-7. General Emission Limits.

EP	EU	Pollutant	Emission Limit(s)	Authority for Requirement
SEP-098	EU-98	Opacity	20%	LCO 10.7
SEP-099 SEP-100	EU-99 EU-100	PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2) LCO 10.9(1)"a"

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

Control Device:
A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4620 / PTO 5013
LCPH ATI 4621 / PTO 5014
LCPH ATI 4622 / PTO 5015

Operating Condition Monitoring and Recordkeeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.
Monitor and record pressure drop on a weekly basis
Authority for Requirement: LCPH ATI 4620 / PTO 5013
LCPH ATI 4621 / PTO 5014
LCPH ATI 4622 / PTO 5015

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

Table Biomass-8. Stack Characteristics.

			Stack Characteristics				
EP	**EU**	**LCPH Permit Numbers**	**Stack Height (feet, above ground)**	**Discharge Style**	**Stack Opening (inches, dia.)**	**Exhaust Temp. (°F)**	**Exhaust Flowrate (scfm)**
SEP-098	EU-98	ATI 4620 / PTO 5013	65	Horizontal	6	130-165	1000
SEP-099	EU-99	ATI 4621 / PTO 5014	65	Horizontal	6	135	1000
SEP-100	EU-100	ATI 4622 / PTO 5015	65	Horizontal	6	130-165	1000

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

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

Stack testing is not required at this time.

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

If an opacity >20 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: SEP-101
Process Area: BIOMASS PROCESSING

Associated Equipment
Associated Emission Unit ID Numbers: EU-101
Emissions Control Equipment ID Number: CE-101
Emissions Control Equipment Description: Dust Collector

Emission Unit vented through this Emission Point: EU-101
Emission Unit Description: Biomass Truck Loadout
Raw Material/Fuel: Dried Biomass
Rated Capacity: 20 ton/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): 20%
Authority for Requirement: LCPH ATI 4623 / PTO 5086
LCO 10.7

Pollutant: PM-10
Emission Limit(s): 0.17 lb/hr
Authority for Requirement: LCPH ATI 4623 / PTO 5086

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf, 0.17 lb/hr
Authority for Requirement: LCPH ATI 4623 / PTO 5086

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

Control Device:
A baghouse shall be used to control particulate matter emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4623 / PTO 5086

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

Stack Height, (ft, from the ground): 25
Discharge Style: Vertical, Unobstructed
Stack Opening, (inches, diameter): 6 x 6
Exhaust Temperature (°F): 135
Exhaust Flow Rate (scfm): 1000
Authority for Requirement: LCPH ATI 4623 / PTO 5086

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

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

Stack testing is not required at this time.

Operating Condition Monitoring and Recordkeeping
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives. The following items shall be recorded:
The owner or operator shall monitor and record "no visible emissions" on a weekly basis.
Maintenance and repair completed on the control devices.
Authority for Requirement: LCPH ATI 4623 / PTO 5086 (modified on 11/15/07)

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

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

attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.
Authority for Requirement: 567 IAC 22.108(14)

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

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)

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"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *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 present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, 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 EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the

compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

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

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
a. Form 1.0 "Facility Identification";
b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
c. Form 5.0 "Title V annual emissions summary/fee"; and
d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
a. Form 1.0 "Facility Identification";
b. Form 5.0 "Title V annual emissions summary/fee";
c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges
Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:
1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information
The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties
The owner or operator of any air emission source or control equipment shall:
1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring
1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
a. The date, place and time of sampling or measurements
b. The date the analyses were performed.
c. The company or entity that performed the analyses.
d. The analytical techniques or methods used.
e. The results of such analyses; and
f. The operating conditions as existing at the time of sampling or measurement.
g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.
b. Maintain a log at the permitted facility of the scenario under which it is operating.
c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

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

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

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

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

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review

of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

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

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

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

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore

normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:
a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
b. The facility at the time was being properly operated;
c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

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

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

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

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

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
d. The changes are not subject to any requirement under Title IV of the Act.
e. The changes comply with all applicable requirements.
f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification,

including the following, which must be attached to the permit by the source, the department and the administrator:
i. A brief description of the change within the permitted facility,
ii. The date on which the change will occur,
iii. Any change in emission as a result of that change,
iv. The pollutants emitted subject to the emissions trade
v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
vii. Any permit term or condition no longer applicable as a result of the change.
567 IAC 22.110(1)
2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

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

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
i. Do not violate any applicable requirements
ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
v. Are not modifications under any provision of Title I of the Act; and
vi. Are not required to be processed as significant modification.
b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
ii. The permittee's suggested draft permit
iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.
3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits
Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*
G20. Asbestos
The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*
G21. Open Burning
The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 <u>except</u> 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*
G22. Acid Rain (Title IV) Emissions Allowances
The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements
1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.
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 June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that

general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*
4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
a. Such applicable requirements are included and are specifically identified in the permit; or
b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

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

G27. Property Rights
The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*
G28. Transferability
This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*
G29. Disclaimer
No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.
Stack test notifications, reports and correspondence shall be sent to:

Linn County Public Health
Supervisor, Air Quality Division
501 13th Street NW
Cedar Rapids, IA 52405

Stack test notifications, reports and correspondence for the initial testing required by a PSD permit shall be sent to the Linn County Public Health address above and to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

567 IAC 25.1(7)"a", 567 IAC 25.1(9)
G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

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

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

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

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

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

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2
P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6
1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

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

Linn County Public Health Dept.
Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

Appendix A: 40 CFR 60 Subpart Db

New Source Performance Standards
NSPS Subpart Db (40 CFR 60.40b - 60.49b)
Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

This subpart applies to the following emission points:
SEP-501
SEP-502
SEP-530

§60.42b Standard for Sulfur Dioxide.
(a) No owner or operator of an affected facility that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain sulfur dioxide in excess of 10 percent (0.10) of the potential sulfur dioxide emission rate (90 percent reduction) and that contain sulfur dioxide in excess of the emission limit determined according to the folllowing formula:
$E_s = (K_aH_a + K_bH_b) / (H_a + H_b)$ where:
E_s is the sulfur dioxide emission limit, in ng/J or lb/MMBtu heat input,
K_a is 520 ng/J (or 1.2 lb/MMBtu)
K_b is 340 ng/L (or 0.8 lb/MMBtu)
H_a is the heat input from the combustion of coal, in J (MMBtu)
H_b is the heat input from the combustion of oil, in J (MMBtu).
Only the heat input supplied to the affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat input to the affected facility from exhaust gases from another source, such as gas turbines, internal combustion engines, kilns, etc.
Except as provided in paragraph (f) of this section, compliance with the emission limits, fuel oil sulfur limits, and/or percent reduction requirements under this section are determined on a 30-day rolling average basis.
(g) Except as provided in paragraph (i) of this section, the sulfur dioxide emission limits and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.
(i) An affected facility subject to the sulfur dioxide standard listed under "Emission Limits" above may combust very low sulfur oil or natural gas when the sulfur dioxide control system is not being operated because of malfunction or maintenance of the sulfur dioxide control system.

§60.43b Standard for Particulate Matter
(a) On and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever comes first, no owner or operator of an affected facility which combusts coal or combusts mixtures or coal with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter in excess of the following emission limits:
22 ng/J (0.051 lb?MMBtu) heat input
If the affected facility combusts only coal
(f) On and after the date on which the initial performance test is completed or is required to be completed under 60.8 of this part, no owner or operator of an affected facility that combusts coal,

oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
(g) The particulate matter and opacity standards apply at all times, except during periods of startup, shutdown or malfunction.

§60.44b Standard for Nitrogen Oxides.
(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section or combusts only coal, oil or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO_2) in excess of the following emission limits:
Fluidized Bed Combustion 260 ng/J (0.60 lb/MMBtu)
(h) For purposes of paragraph (i) of this section, the nitrogen oxide standards under this section apply at all times including periods of startup, shutdown, or malfunction.
(i) Except as provided under paragraph (j) of this section, compliance with the emission limits under this section is determined on a 30-day rolling average basis.
(l) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility which commenced construction or reconstruction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO_2) in excess of the following limits:
(1) If the affected facility combusts coal, oil or natural gas, or a mixture of these fuels, or with any other fuels: A limit of 86 ng/J (0.20 lb/MMBtu) heat input unless the affected facility has an annual capacity factor for coal, oil and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas.

§60.45b Compliance & Performance Test Methods and Procedures for SO_2:
(a) The sulfur dioxide emission standards under §60.42b apply at all times.
(b) The owner or operator of an affected facility shall conduct performance tests to determine compliance with the percent of potential sulfur dioxide emission rate ($\%P_s$) and the sulfur dioxide emission rate (E_s) pursuant to §60.42b following the procedures listed below:
(2) If only coal or only oil is combusted, the following procedures are used:
(i) The procedures in Method 19 are used to determine the hourly SO_2 emission rate (E_{ho}) and the 30-day average emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the continuous emission monitoring system of §60.47b(a) or (b).
(ii) The percent of potential SO_2 emission rate ($\%P_s$) emitted to the atmosphere is computed using the following formula:
$\%P_s = 100\ (1-\%R_g/100)(1-\%R_f/100)$
where:
$\%R_g$ is the SO_2 removal efficiency of the control device as determined by Method 19, in %
$\%R_f$ is the SO_2 removal efficiency of fuel pretreatment as determined by Method 19, in %
(g) After the initial performance test, compliance with the SO_2 emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for sulfur dioxide for 30 successive steam generating unit operating days. A

separate performance test is completed at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate and percent reduction for SO_2 are calculated to show compliance with the standard.
(h) Except as provided under paragraph (i) of this section, the owner or operator of an affected facility shall use all valid sulfur dioxide emissions data in calculating $\%P_s$ and E_{ho} under paragraph (c) of this section, whether or not the minimum emissions data requirements under §60.46b are achieved. All valid emissions data, including valid sulfur dioxides emission data collected during periods of startup, shutdown, and malfunction, shall be used in calculating $\%P_s$ and E_{ho} pursuant to paragraph (c) of this section.
(i) During periods of malfunction or maintenance of the sulfur dioxide control systems when oil is combusted as provided under §60.42b(i), emission data are not used to calculate $\%P_s$ or E_s under §60.42b(a), (b) or (c), however, the emissions data are used to determine compliance with the emission limit under §60.42b(i).

§60.46b Compliance and Performance Test Methods and Procedures for Particulate Matter and Nitrogen Oxides.
(a) The particulate matter emission standards and opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction. The nitrogen oxides emission standards under §60.44b apply at all times.
(c) Compliance with the nitrogen oxides emission standards under §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.
(e) To determine compliance with the emission limits for nitrogen oxides required under §60.44b, the owner or operator of an affected facility shall conduct the performance test as required under §60.8 using the continuous system for monitoring nitrogen oxides under §60.48(b).
(2) Following the date on which the initial performance test is completed or is required to be completed under §60.8 of this part, whichever date comes first, the owner or operator of an affected facility which combusts coal or which combusts residual oil having a nitrogen content greater than 0.30 weight percent shall determine compliance with the nitrogen oxides emission standards under §60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam generating unit operating days.

§60.47b Emission Monitoring for Sulfur Dioxide.
(a) Each owner or operator of an affected facility subject to the sulfur dioxide standards under §60.42b shall install, calibrate, maintain, and operate continuous monitoring systems (CEMS) for measuring the sulfur dioxide concentrations and either oxygen (O_2) or carbon dioxide (CO_2) concentrations and shall record the output of the systems. The sulfur dioxide and either oxygen or carbon dioxide concentrations shall both be monitored at the inlet and outlet of the sulfur dioxide control device.
(c) The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring

systems as approved by the Administrator or the reference methods and procedures as described in §60.47b(b).
(d) The 1-hour average SO_2 emission rates measured by the CEMS required by paragraph (a) of this section and required under **§60.13(h)** is expressed in ng/J or lb/million Btu heat input and is used to calculate the average emission rates under §60.42b. Each 1-hour average sulfur dioxide emission rate must be based on more than 30 minutes of steam generating unit operation and include at least 2 data points with each representing a 15-minute period. Hourly sulfur dioxide emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.
(e) The procedures under §60.13 shall be followed for installation, evaluation and operation of the CEMS.
(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2 and 3 (Appendix B).
(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 (Appendix F).
(3) For affected facilities combusting coal or oil, alone or in combination with other fuels, the span value of the sulfur dioxide CEMS at the inlet to the sulfur dioxide control device is 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the fuel combusted, and the span value of the CEMS at the outlet to the sulfur dioxide control device is 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the fuel combusted.

§60.48b Emission Monitoring for Particulate Matter and Nitrogen Oxides:
(a) The owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.
(b) …The owner or operator of an affected facility shall comply with either paragraphs (b)(1) or (b)(2) of this section.
(1) Install, calibrate, maintain and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere.
(c) The continuous monitoring systems for nitrogen oxide emissions required under paragraph (b) of this section shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.
(d) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor required by paragraph (b) of this section and required under **§60.13(h)** shall be expressed in ng/J or lb/million Btu heat input and shall be used to calculate the average emission rates under §60.44b. The 1-hour averages shall be calculated using the data points required under §60.13(b). At least two data points must be used to calculate each 1-hour average.
(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.
(1) For affected facilities combusting coal, wood or municipal-type solid waste, the span value for a continuous monitoring system for measuring opacity shall be between 60 and 80 percent.
(2) For affected facility combusting coal, oil, or natural gas, the span value for nitrogen oxides is 1000 ppm.
(f) When nitrogen oxides emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data

will be obtained by using standby monitoring systems, Method 7, 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.

§60.49b Reporting and Recordkeeping Requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility.

(b) The owner or operator of each affected facility subject to the sulfur dioxide, particulate matter, and/or nitrogen oxides emission limits under §§60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B. …

(f) For facilities subject to the opacity standard under §60.43b, the owner or operator shall maintain records of opacity.

(g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the nitrogen oxides standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date.

(2) The average hourly nitrogen oxides emission rates (expressed as NO_2) (lb/million Btu heat input) measured or predicted.

(3) The 30-day average nitrogen oxides emission rates (lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.

(4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

(9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h) (1) or (2) of this section is required to submit excess emission reports for any excess emissions which occurred during the reporting period.

(1) Any affected facility subject to the opacity standards under §60.43b(e) or to the operating parameter monitoring requirements under §60.13(I)(1).
(3) For the purpose of §60.43b, excess emissions are defined as all 6-minue periods during which the average opacity exceeds the opacity standards under §60.43b(f).
(i) The owner or operator of any affected facility subject to the continuous monitoring requirements for nitrogen oxides under §60.48b shall submit reports containing the information recorded under paragraph (g) of this section.
(j) The owner or operator of any affected facility subject to the sulfur dioxide standards under §60.42b shall submit reports.
(k) For each affected facility subject to the compliance and performance testing requirements of §60.45b and the reporting requirement in paragraph (j) of this section, the following information shall be reported to the Administrator:
(1) Calendar dates covered in the reporting period.
(2) Each 30-day average sulfur dioxide emission rate (ng/J or lb/MMBtu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken.
(3) Each 30-day average percent reduction in sulfur dioxide emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken.
(4) Identification of the steam generating unit operating days that coal or oil was combusted and for which sulfur dioxide or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective actions taken.
(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
(7) Identification of times when hourly averages have been obtained based on manual sampling methods.
(8) Identification of the times when the pollutant concentration exceed full span of the CEMS.
(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3.
(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1.
(n) If a percent removal efficiency by fuel pretreatment (i.e., $\%R_f$) is used to determine the overall percent reduction (i.e.,$\%R_o$) under §60.45b, the owner or operator of the affected facility shall submit a signed statement with the report.
(1) Indicating what removal efficiency by fuel pretreatment (i.e.,%Rf) was credited during the reporting period.
(2) Listing the quantity, heat content, and date each pre-treated fuel shipment was received during the reporting period, the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the reporting period.

(3) Documenting the transport of the fuel from the fuel pretreatment facility to the steam generating unit.
(4) Including a signed statement from the owner or operator of the fuel pretreatment facility certifying that the percent removal efficiency achieved by fuel pretreatment was determined in accordance wit the provisions of Method 19 (appendix A) and listing the heat content and sulfur content of each fuel before and after fuel pretreatment.
(o) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.
(v) The owner or operator of an affected facility may submit electronic quarterly reports for SO_2 and/or NO_x and/or opacity in lieu of submitting the written reports required under §60.449b(h), (i), (j), (k) or (l). The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.
(w) The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

Appendix B: 40 CFR 60 Subpart Kb

NSPS Subpart Kb (40 CFR 60.110b-60.117b)
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

This subpart applies to the following emission points:
SEP-073
SEP-074

§60.112b Standard for Volatile Organic Compounds (VOC).
(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m3 but less than 151 me containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:
(1) A fixed roof in combination with an internal floating roof meeting the following specifications:
(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during the initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
(A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
(vii) Each penetration of the internal floating for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

§60.113b Testing and Procedures.
The owner or operator of each storage vessel as specified in §60.112b(a) shall meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particulate storage vessel depends on the control equipment installed to meet the requirements of §60.112b.
(a) After installing the control equipment required to meet §60.112(a)(1)(permanently affixed roof and internal floating roof), each owner or operator shall:
(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
(2) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
(3) For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B):
(i) Visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or
(ii) Visually inspect the vessel as specified in paragraph (a)(2) of this section.
(4) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii)

of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section.
(5) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

§60.114b Alternative Means of Emission Limitation.
(a) If, in the Administrator's judgement, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112b, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.
(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.
(c) Any person seeking permission under this section shall submit to the Administrator a written application including:
(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.
(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.
(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112b.

§60.115b Reporting and Recordkeeping Requirements.
The owner or operator of each storage vessel as specified in §60.112b(a) shall keep records and furnish reports as required by paragraphs (a), (b), and (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least 2 years. The record for (c)(1) will be kept for the life of the control equipment.
(a) After installing control equipment in accordance with §60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.
(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall be an attachment to the notification required by §60.7(a)(3).
(2) Keep a record of each inspection performed as required by §60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and

shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
(3) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
(4) After each inspection required by §60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §60.112b(a)(1) or §60.113b(a)(3) and list each repair made.

§60.116b Monitoring of Operations.
(a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.
(b) The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
(c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 me but less than 151 m3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
(d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.
(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference – see §60.17), unless the Administrator specifically requests that

the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
(3) For other liquids, the vapor pressure:
(i) May be obtained from standard reference texts, or
(ii) Determined by ASTM D2879-83, 96, or 97 (Incorporated by reference – see §60.17); or
(iii) Measured by an appropriate method approved by the Administrator; or
(iv) Calculated by an appropriate method approved by the Administrator.

Appendix C: 40 CFR 60 Subpart Y

NSPS Subpart Y (40 CFR 60.250 - 60.254)
Standards of Performance for Coal Preparation Plants

This subpart applies to the following emission points:
SEP-503
SEP-504
SEP-514
SEP-537

§60.252 Standards for Particulate Matter.
(c) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

§60.254 Test Methods and Procedures.
(b) The owner or operator shall determine compliance with the particulate matter standards in §60.252 as follows:
(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

Appendix D: 40 CFR 60 Subpart VV

NSPS Subpart VV (40 CFR 60.480-60.489)
Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry

This subpart applies to the following emission points:

SEP-071	SEP-074	SEP-077	SEP-082	
SEP-072	SEP-075	SEP-080	SEP-073	SEP-076
SEP-081				

§60.482-1 Standards: General.

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§60.482-1 through 60.482-10 or §60.480(e) for all equipment within 180 days of initial startup.

(b) Compliance with §§60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485.

(c)(1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of §§60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, or 60.482-10 as provided in §60.484.

(2) If the Administrator makes a determination that a means of emission limitations is at least equivalent to the requirements of §§60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, or 60.482-10, an owner or operator shall comply with the requirements of that determination.

(d) Equipment that is in vacuum service is excluded from the requirements of §§60.482-2 to 60-482-10 if it is identified as required in §60.486(e)(5).

§60.482-2 Standards: Pumps in Light Liquid Service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485(b), except as provided in §60.482-1(c) and paragraphs(d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), Provided the following requirements are met:

(1) Each dual mechanical seal system is –

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482-10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
(2) The barrier fluid system is in heavy liquid service or is not in VOC service.
(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system or both.
(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
(5)(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and
(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii), a leak is detected.
(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60-482-9.
(iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(e) Any pump that is designated, as described in §60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:
(1) Has no externally actuated shaft penetrating the pump housing.
(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in §60.485(c), and
(3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.
(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §60.482-10, it is exempt from paragraphs (a) through (e) of this section.
(g) Any pump that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:
(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and
(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.
(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

§60.482-4 Standards: Pressure Relief Devices in Gas/Vapor Service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485(c).
(b)(1) After each pressure release, the pressure relief device shall be returned to a condition ofno detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in §60.482-9.
(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485(c).
(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in §60.482-10 is exempted from the requirements of paragraphs (a) and (b) of this section.
(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d) (2) of this section.
(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482-9.

§60.482-5 Standards: Sampling Connection Systems.
(a)(1) Each sampling connection system shall be equipped with a closed-purged, close-loop, or closed-vent system, except as provided in §60.482-1(c). Gases displaced during filling of the sample container are not required to be collected or captured.
(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section:
(1) Return the purged process fluid directly to the process line; or
(2) Collect and recycle the purged process fluid to a process; or
(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of §60.482-10; or
(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:
(i) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;
(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or
(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.
(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

§60.482-6 Standards: Open-ended Valves or Lines
(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1(c).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
(c) When the double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.
(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b), and (c) of this section.
(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or
would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

§60.482-7 Standards: Valves in Gas/Vapor Service and in Light Liquid Service.
(a) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), §60.483-1, 2, and §60.482-1(c).
(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §60.482-9.
(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(e) First attempts at repair include, but are not limited to, the following best practices where practicable:
(1) Tightening of bonnet bolts;
(2) Replacement of bonnet bolts;
(3) Tightening of packing gland nuts;
(4) Injection of lubricant into lubricated packing.
(f) Any valve that is designated, as described in §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:
(1) Has no external actuating mechanism in contact with the process fluid,
(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485(c), and
(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.
(g) Any valve that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and
(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
(h) Any valve that is designated, as described in §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:
(1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a supported surface.
(2) The process unit within which the valve is located either becomes an affected facility through §60.14 or §60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

§60.482-8 Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Connectors.
(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:
(1) The owner or operator shall monitor the equipment within 5 days by the method specified in §60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.
(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.
(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9.
(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(d) First attempts at repair include, but are not limited to, the best practices described under §60.482-7(e).

§60.482-9 Standards: Delay of Repair.
(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
(c) Delay of repair for valves will be allowed if:
(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §60.482-10.
(d) Delay of repair for pumps will be allowed if:
(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process shutdown.

§60.483-1 Alternative Standards for Valves – Allowable Percentage of Valves Leaking.
(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.
(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:
(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in §60.487(d).
(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.
(3) If a valve leak is detected, it shall be repaired in accordance with §60.482-7(d) and (e).
(c) Performance tests shall be conducted in the following manner:
(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in §60.485(b).
(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.
(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.

§60.483-2 Alternative Standards for Valves – Skip Period Leak Detection and Repair.
(a)(1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.
(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in §60.487(d).
(b)(1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in §60.482-7.
(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
(3) After 3 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in §60.482-7 but can again elect to use this section.
(5) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during the current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.

(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.

§60.484 Equivalence of Means of Emission Limitation:
(a) Each owner or operator subject to the provisions of this subpart may apply to the Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart.
(b) Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:
(1) Each owner or operator applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.
(2) The Administrator will compare test data for the means of emission limitation to test data for the equipment, design and operational requirements.
(3) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.
(c) Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:
(1) Each owner or operator applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.
(2) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.
(3) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.
(4) Each owner or operator applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.
(5) The Administrator will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4).
(6) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.
(d) An owner or operator may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.
(e)(1) After a request for determination of equivalence is received, the Administrator will publish a notice in the Federal Register and provide the opportunity for public hearing if the Administrator judges that the request may be approved.
(2) After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the Federal Register.
(3) Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the Clean Air Act.
(f)(1) Manufacturer's of equipment used to control equipment leaks of VOC may apply to the

Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.
(2) The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of this section.

§60.485 Test Methods and Procedures:
(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
(b) The owner or operator shall determine compliance with the standards in §60.482, 60.483, and 60.484 as follows:
(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:
(i) Zero air (less than 10 ppm of hydrocarbon in air); and
(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.
(c) The owner or operator shall determine compliance with the no detectable emission standards in §§60.482-2(e), 60.482-4, and 60.482-7(f) as follows:
(1) The requirements of paragraph (b) shall apply.
(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:
(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference-see§60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.
(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
(3) Engineering judgement may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgement, paragraphs (d)(1) and (2) of this section shall be used to resolve the disagreement.
(e) The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:
(1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20°C (1.2 in H_2O at 68°F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference – see §60.17) shall be used to determine vapor pressures.
(2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20°C(1.2 in H_2O at 68°F) is equal to or greater than 20 percent by weight.
(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.
(g) The owner or operator shall determine compliance with the standards of flares as follows:
(1) Method 22 shall be used to determine visible emissions.
(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.
(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$V_{max} = K_1 + K_2H_T$ Where:
V_{max} = maximum permitted velocity, m/sec (ft/sec)
H_T = Net heating value of the gas being combusted, MJ/scm (Btu/scf)
K_1 = 8.706 m/sec (metric units) = 28.56 ft/sec (English units)
K_2 = 0.7084 m4/(MJ-sec) (metric units) = 0.087 ft4/(Btu-sec) (English units)

(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:

$$H_T = K\sum C_i H_i$$

Where:
K = Conversion constant, 1.740 x 10^7 (g-mole)(MJ)/(ppm-scm-kcal) (metric units)
= 4.674 x 10^8 [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)
C_i = Concentration of sample component "i," ppm
H_i = net heat of combustion of sample component "i" at 25 °C and 760 mmHg (77°F and 14.7 psi), kcal/g-mole
(5) Method 18 and ASTM D2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference – see §60.17) shall be used to determine the concentration of sample component "i."
(6) ASTM D2382-76 or 88 or D4809-95 (incorporated by reference – see §60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.
(7) Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free)cross-sectional area of the flare tip shall be used.

§60.486 Recordkeeping Requirements:
(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.
(b) When each leak is detected as specified in §§60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.482-2, the following requirements apply:
(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482-7(c) and no leak has been detected during those 2 months.
(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in §§60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
(1) The instrument and operator identification numbers and the equipment identification number.
(2) The date the leak was detected and the dates of each attempt to repair the leak.
(3) Repair methods applied in each attempt to repair the leak.
(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.
(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
(9) The date of successful repair of the leak.
…
(e) The following information pertaining to all equipment subject to the requirements in §60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:
(1) A list of identification numbers for equipment subject to the requirements of this subpart.
(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§60.482-2(e), 60.482-3(I) and 60.482-7(f).
(ii) The designation of equipment as subject to the requirements of §60.482-2(e), §60.482-3(i), or 60.482-7(f) shall be signed by the owner or operator.
(3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482-4.
(4)(i) The dates of each compliance test as required in §§60.482-2(e), 60-482-(i), 60.482-4, and 60.482-7(f).
(ii) The background level measured during each compliance test.
(iii) The maximum instrument reading measured at the equipment during each compliance test.
(5) A list of identification numbers for equipment in vacuum service.
(f) The following information pertaining to all valves subject to the requirements of §60.482-7(g) and (h) and to all pumps subject to the requirements of §60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:
(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
(2) A list of identification numbers for valves that are designated as difficult-to-monitoring, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
(g) The following information shall be recorded for valves complying with §60.483-2:
(1) A schedule of monitoring.
(2) The percent of valves found leaking during each monitoring period.
(h) The following information shall be recorded in a log that is kept in a readily accessible location:
(1) Design criterion required in §§60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and

Any changes to this criterion and the reasons for the changes.
(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in §60.480(d):
(1) An analysis demonstrating the design capacity of the affected facility,
(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
(3) An analysis demonstrating that equipment is not in VOC service.
(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.
(k) The provisions of §60.7(b) and (d) do not apply to affected facilities subject to this subpart.

§60.487 Reporting Requirements:
(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.
…
(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §60.486:
(1) Process unit identification
(2) For each month during the semiannual reporting period,
(i) Number of valves for which leaks were detected as described in §60.482(7)(b) or §60.483-2,
(ii) Number of valves for which leaks were not repaired as required in §60.482-7(d)(1)
Number of pumps for which leaks were detected as described in §60.482-2(b) and (d)(6)(I),
(vii)The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
(3) Dates of process unit shutdowns which occurred within the semiannual reporting period
(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.
(d) An owner or operator electing to comply with the provisions of §§60.483-1 or 60-483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.
(e) An owner or operator shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §60.8(d) do no apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.
(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs(a) through(c) of this section, provided that they comply with the requirements established by the State.

§60.488 Reconstruction.
(a) The cost of the following frequently replaced components of the facility shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital costs that would be required to construct a comparable new facility" under §60.15: pump seals, nuts and bolts, rupture disks, and packings.

(b) Under §60.15, the "fixed capital cost of new components" includes the fixed capital cost of all depreciable components (except components specified in §60.488(a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following the applicability date for the appropriate subpart. (See the "Applicability and designation of affected facility" section of the appropriate subpart.) For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.

§60.489 List of Chemicals Produced by Affected Facilities.
The following chemicals are produced, as intermediates or final products, by process units covered under this subpart. The applicability date for process units producing one or more of these chemicals is January 5, 1981.

See the complete rule text for the entire list. The applicable chemicals for ADM are listed below.

CAS No.	Chemical
64-17-5	Ethanol

Appendix E : 40 CFR 61 Subpart M

Subpart M—National Emission Standard for Asbestos

Authority: 42 U.S.C. 7401, 7412, 7414, 7416, 7601.

Source: 49 FR 13661, Apr. 5, 1984, unless otherwise noted.

§ 61.140 Applicability.

The provisions of this subpart are applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155.

[55 FR 48414, Nov. 20, 1990]

§ 61.141 Definitions.

All terms that are used in this subpart and are not defined below are given the same meaning as in the Act and in subpart A of this part.

Active waste disposal site means any disposal site other than an inactive site.

Adequately wet means sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

Asbestos means the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite.

Asbestos-containing waste materials means mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this subpart. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos including disposable equipment and clothing.

Asbestos mill means any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos material is not considered a part of the asbestos mill.

Asbestos tailings means any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

Asbestos waste from control devices means any waste material that contains asbestos and is collected by a pollution control device.

Category I nonfriable asbestos-containing material (ACM) means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy.

Category II nonfriable ACM means any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Commercial asbestos means any material containing asbestos that is extracted from ore and has value because of its asbestos content.

Cutting means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching.

Demolition means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

Emergency renovation operation means a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

Fabricating means any processing (*e.g.,* cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.

Facility means any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation or building that was previously subject to this subpart is not excluded, regardless of its current use or function.

Facility component means any part of a facility including equipment.

Friable asbestos material means any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

Fugitive source means any source of emissions not controlled by an air pollution control device.

Glove bag means a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove-bag installation, equipment and supplies, and work practices is contained in the Occupational Safety

and Health Administration's (OSHA's) final rule on occupational exposure to asbestos (appendix G to 29 CFR 1926.58).

Grinding means to reduce to powder or small fragments and includes mechanical chipping or drilling.

In poor condition means the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

Inactive waste disposal site means any disposal site or portion of it where additional asbestos-containing waste material has not been deposited within the past year.

Installation means any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).

Leak-tight means that solids or liquids cannot escape or spill out. It also means dust-tight.

Malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.

Manufacturing means the combining of commercial asbestos—or, in the case of woven friction products, the combining of textiles containing commercial asbestos—with any other material(s), including commercial asbestos, and the processing of this combination into a product. Chlorine production is considered a part of manufacturing.

Natural barrier means a natural object that effectively precludes or deters access. Natural barriers include physical obstacles such as cliffs, lakes or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a natural barrier.

Nonfriable asbestos-containing material means any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Nonscheduled renovation operation means a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operating experience, but for which an exact date cannot be predicted.

Outside air means the air outside buildings and structures, including, but not limited to, the air under a bridge or in an open air ferry dock.

Owner or operator of a demolition or renovation activity means any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both.

Particulate asbestos material means finely divided particles of asbestos or material containing asbestos.

Planned renovation operations means a renovation operation, or a number of such operations, in which some RACM will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

Regulated asbestos-containing material (RACM) means (a) Friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

Remove means to take out RACM or facility components that contain or are covered with RACM from any facility.

Renovation means altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

Resilient floor covering means asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than 1 percent asbestos as determined using polarized light microscopy according to the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy.

Roadways means surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.

Strip means to take off RACM from any part of a facility or facility components.

Structural member means any load-supporting member of a facility, such as beams and load supporting walls; or any nonload-supporting member, such as ceilings and nonload-supporting walls.

Visible emissions means any emissions, which are visually detectable without the aid of instruments, coming from RACM or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operation. This does not include condensed, uncombined water vapor.

Waste generator means any owner or operator of a source covered by this subpart whose act or process produces asbestos-containing waste material.

Waste shipment record means the shipping document, required to be originated and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material.

Working day means Monday through Friday and includes holidays that fall on any of the days Monday through Friday.

[49 FR 13661, Apr. 5, 1984; 49 FR 25453, June 21, 1984, as amended by 55 FR 48414, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991; 60 FR 31920, June 19, 1995]

§ 61.142 Standard for asbestosmills.

(a) Each owner or operator of an asbestos mill shall either discharge no visible emissions to the outside air from that asbestos mill, including fugitive sources, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(b) Each owner or operator of an asbestos mill shall meet the following requirements:

(1) Monitor each potential source of asbestos emissions from any part of the mill facility, including air cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least 15 seconds duration per source of emissions.

(2) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunction, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the Administrator, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(i) Maintenance schedule.

(ii) Recordkeeping plan.

(3) Maintain records of the results of visible emissions monitoring and air cleaning device inspections using a format similar to that shown in Figures 1 and 2 and include the following:

(i) Date and time of each inspection.

(ii) Presence or absence of visible emissions.

(iii) Condition of fabric filters, including presence of any tears, holes, and abrasions.

(iv) Presence of dust deposits on clean side of fabric filters.

(v) Brief description of corrective actions taken, including date and time.

(vi) Daily hours of operation for each air cleaning device.

(4) Furnish upon request, and make available at the affected facility during normal business hours for inspection by the Administrator, all records required under this section.

(5) Retain a copy of all monitoring and inspection records for at least 2 years.

(6) Submit semiannually a copy of visible emission monitoring records to the Administrator if visible emissions occurred during the report period. Semiannual reports shall be postmarked by the 30th day following the end of the six-month period.

Date of inspection (mo/day/yr)	Time of inspection (a.m./p.m.)	Air cleaning device or fugitive source designation or number	Visible emissions observed (yes/no), corrective action taken	Daily operating hours	Inspector's initials

Figure 1. Record of Visible Emission Monitoring

View or download PDF

1. Air cleaning device designation or number _____
2. Date of inspection _____ _____ _____ _____
3. Time of inspection _____ _____ _____ _____
4. Is air cleaning device operating properly (yes/no) _____ _____ _____ _____
5. Tears, holes, or abrasions in fabric filter (yes/no) _____ _____ _____ _____
6. Dust on clean side of fabric filters (yes/no) _____ _____ _____ _____
7. Other signs of malfunctions or potential malfunctions (yes/no) _____ _____ _____ _____
8. Describe other malfunctions or signs of potential malfunctions. _____
9. Describe corrective action(s) taken. _____
10. Date and time corrective action taken _____ _____ _____ _____
11. Inspected by

(Print/Type Name)	(Title)	(Signature)	(Date)
(Print/Type Name)	(Title)	(Signature)	(Date)

Figure 2. Air Cleaning Device Inspection Checklist

View or download PDF

[55 FR 48416, Nov. 20, 1990, as amended at 64 FR 7467, Feb. 12, 1999]

§ 61.143 Standard for roadways.

No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings.

(a) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine): or

(b) It is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or

(c) It is encapsulated in asphalt concrete meeting the specifications contained in section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP–85, 1985, or their equivalent.

[55 FR 48419, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991]

§ 61.144 Standard for manufacturing.

(a) *Applicability.* This section applies to the following manufacturing operations using commercial asbestos.

(1) The manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials.

(2) The manufacture of cement products.

(3) The manufacture of fireproofing and insulating materials.

(4) The manufacture of friction products.

(5) The manufacture of paper, millboard, and felt.

(6) The manufacture of floor tile.

(7) The manufacture of paints, coatings, caulks, adhesives, and sealants.

(8) The manufacture of plastics and rubber materials.

(9) The manufacture of chlorine utilizing asbestos diaphragm technology.

(10) The manufacture of shotgun shell wads.

(11) The manufacture of asphalt concrete.

(b) *Standard.* Each owner or operator of any of the manufacturing operations to which this section applies shall either:

(1) Discharge no visible emissions to the outside air from these operations or from any building or structure in which they are conducted or from any other fugitive sources; or

(2) Use the methods specified by §61.152 to clean emissions from these operations containing particulate asbestos material before they escape to, or are vented to, the outside air.

(3) Monitor each potential source of asbestos emissions from any part of the manufacturing facility, including air cleaning devices, process equipment, and buildings housing material processing and handling equipment, at least once each day during daylight hours for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least 15 seconds duration per source of emissions.

(4) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the Administrator, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(i) Maintenance schedule.

(ii) Recordkeeping plan.

(5) Maintain records of the results of visible emission monitoring and air cleaning device inspections using a format similar to that shown in Figures 1 and 2 and include the following.

(i) Date and time of each inspection.

(ii) Presence or absence of visible emissions.

(iii) Condition of fabric filters, including presence of any tears, holes and abrasions.

(iv) Presence of dust deposits on clean side of fabric filters.

(v) Brief description of corrective actions taken, including date and time.

(vi) Daily hours of operation for each air cleaning device.

(6) Furnish upon request, and make available at the affected facility during normal business hours for inspection by the Administrator, all records required under this section.

(7) Retain a copy of all monitoring and inspection records for at least 2 years.

(8) Submit semiannually a copy of the visible emission monitoring records to the Administrator if visible emission occurred during the report period. Semiannual reports shall be postmarked by the 30th day following the end of the six-month period.

[49 FR 13661, Apr. 5, 1984, as amended at 55 FR 48419, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991; 64 FR 7467, Feb. 12, 1999]

§ 61.145 Standard for demolition and renovation.

(a) *Applicability.* To determine which requirements of paragraphs (a), (b), and (c) of this section apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part

of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of paragraphs (b) and (c) of this section apply to each owner or operator of a demolition or renovation activity, including the removal of RACM as follows:

(1) In a facility being demolished, all the requirements of paragraphs (b) and (c) of this section apply, except as provided in paragraph (a)(3) of this section, if the combined amount of RACM is

(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or

(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

(2) In a facility being demolished, only the notification requirements of paragraphs (b)(1), (2), (3)(i) and (iv), and (4)(i) through (vii) and (4)(ix) and (xvi) of this section apply, if the combined amount of RACM is

(i) Less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) on other facility components, and

(ii) Less than one cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously or there is no asbestos.

(3) If the facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of paragraphs (b)(1), (b)(2), (b)(3)(iii), (b)(4) (except (b)(4)(viii)), (b)(5), and (c)(4) through (c)(9) of this section apply.

(4) In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of paragraphs (b) and (c) of this section apply if the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is

(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or

(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

(iii) To determine whether paragraph (a)(4) of this section applies to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31.

(iv) To determine whether paragraph (a)(4) of this section applies to emergency renovation operations, estimate the combined amount of RACM to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.

(5) Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09.

(b) *Notification requirements.* Each owner or operator of a demolition or renovation activity to which this section applies shall:

(1) Provide the Administrator with written notice of intention to demolish or renovate. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent.

(3) Postmark or deliver the notice as follows:

(i) At least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge or similarly disturb asbestos material), if the operation is described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section. If the operation is as described in paragraph (a)(2) of this section, notification is required 10 working days before demolition begins.

(ii) At least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in paragraph (a)(4)(iii) of this section.

(iii) As early as possible before, but not later than, the following working day if the operation is a demolition ordered according to paragraph (a)(3) of this section or, if the operation is a renovation described in paragraph (a)(4)(iv) of this section.

(iv) For asbestos stripping or removal work in a demolition or renovation operation, described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section, and for a demolition described in paragraph (a)(2) of this section, that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator as follows:

(A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,

(*1*) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and

(*2*) Provide the Administrator with a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by the U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(B) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin on a date earlier than the original start date,

(*1*) Provide the Administrator with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins.

(*2*) For demolitions covered by paragraph (a)(2) of this section, provide the Administrator written notice of a new start date at least 10 working days before commencement of demolition. Delivery of updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(C) In no event shall an operation covered by this paragraph begin on a date other than the date contained in the written notice of the new start date.

(4) Include the following in the notice:

(i) An indication of whether the notice is the original or a revised notification.

(ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.

(iii) Type of operation: demolition or renovation.

(iv) Description of the facility or affected part of the facility including the size (square meters [square feet] and number of floors), age, and present and prior use of the facility.

(v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM.

(vi) Estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before demolition.

(vii) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state, of the facility being demolished or renovated.

(viii) Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in paragraph (a)(4)(iii) of this section.

(ix) Scheduled starting and completion dates of demolition or renovation.

(x) Description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components.

(xi) Description of work practices and engineering controls to be used to comply with the requirements of this subpart, including asbestos removal and waste-handling emission control procedures.

(xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.

(xiii) A certification that at least one person trained as required by paragraph (c)(8) of this section will supervise the stripping and removal described by this notification. This requirement shall become effective 1 year after promulgation of this regulation.

(xiv) For facilities described in paragraph (a)(3) of this section, the name, title, and authority of the State or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification.

(xv) For emergency renovations described in paragraph (a)(4)(iv) of this section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden.

(xvi) Description of procedures to be followed in the event that unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.

(xvii) Name, address, and telephone number of the waste transporter.

(5) The information required in paragraph (b)(4) of this section must be reported using a form similiar to that shown in Figure 3.

(c) *Procedures for asbestos emission control.* Each owner or operator of a demolition or renovation activity to whom this paragraph applies, according to paragraph (a) of this section, shall comply with the following procedures:

(1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:

(i) It is Category I nonfriable ACM that is not in poor condition and is not friable.

(ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or

(iii) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of.

(iv) They are Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.

(2) When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:

(i) Adequately wet all RACM exposed during cutting or disjoining operations; and

(ii) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM.

(3) When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.

(i) In renovation operations, wetting is not required if:

(A) The owner or operator has obtained prior written approval from the Administrator based on a written application that wetting to comply with this paragraph would unavoidably damage equipment or present a safety hazard; and

(B) The owner or operator uses of the following emission control methods:

(*1*) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.

(*2*) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.

(*3*) Leak-tight wrapping to contain all RACM prior to dismantlement.

(ii) In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in paragraph (c)(3)(i) of this section cannot be used, another method may be used after obtaining written approval from the Administrator based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph (c)(3)(i) of this section.

(iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.

(4) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to paragraph (c)(2) of this section, it shall be stripped or contained in leak-tight wrapping, except as described in paragraph (c)(5) of this section. If stripped, either:

(i) Adequately wet the RACM during stripping; or

(ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.

(5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (c)(2), (3), and (4) of this section), the RACM is not required to be stripped if the following requirements are met:

(i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.

(ii) The component is encased in a leak-tight wrapping.

(iii) The leak-tight wrapping is labeled according to §61.149(d)(1)(i), (ii), and (iii) during all loading and unloading operations and during storage.

(6) For all RACM, including material that has been removed or stripped:

(i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with §61.150; and

(ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.

(iii) Transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections.

(iv) RACM contained in leak-tight wrapping that has been removed in accordance with paragraphs (c)(4) and (c)(3)(i)(B)(*3*) of this section need not be wetted.

(7) When the temperature at the point of wetting is below 0 °C (32 °F):

(i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.

(ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.

(iii) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Administrator during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.

(8) Effective 1 year after promulgation of this regulation, no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on-site representative, such as a foreman or management-level person or other authorized representative, trained in the provisions of this regulation and the means of complying with them, is present. Every 2 years, the trained on-site individual shall receive refresher training in the provisions of this regulation. The required training shall include as a minimum: applicability; notifications; material identification; control procedures for removals including, at least, wetting, local exhaust ventilation, negative pressure enclosures, glove-bag procedures, and High Efficiency Particulate Air (HEPA) filters; waste disposal work practices; reporting and recordkeeping; and asbestos hazards and worker protection. Evidence that the required training has been completed shall be posted and made available for inspection by the Administrator at the demolition or renovation site.

(9) For facilities described in paragraph (a)(3) of this section, adequately wet the portion of the facility that contains RACM during the wrecking operation.

(10) If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with the NESHAP before burning.

NOTIFICATION OF DEMOLITION AND RENOVATION

Operator Project #	Postmark	Date Received	Notification #

I. TYPE OF NOTIFICATION (O=Original R=Revised C=Cancelled):

II. FACILITY INFORMATION (Identify owner, removal contractor, and other operator)

OWNER NAME:		
Address:		
City:	State:	Zip:
Contact:		Tel:
REMOVAL CONTRACTOR:		
Address:		
City:	State:	Zip:
Contact:		Tel:
OTHER OPERATOR:		
Address:		
City:	State:	Zip:
Contact:		Tel:

III. TYPE OF OPERATION (D=Demo O=Ordered Demo R=Renovation E=Emer.Renovation):

IV. IS ASBESTOS PRESENT? (Yes/No)

V. FACILITY DESCRIPTION (Include building name, number and floor or room number)

Bldg Name:		
Address:		
City:	State:	County:
Site Location:		
Building Size:	# of Floors:	Age in Years:
Present Use:	Prior Use:	

VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:

VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING: 1. Regulated ACM to be removed 2. Category I ACM Not Removed 3. Category II ACM Not Removed	RACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below	
		Cat I	Cat II	UNIT	
Pipes				LnFt:	Lin Ft
Surface Area				SqFt:	Sq Ft
Vol RACM Off Facility Component				CuFt:	Cu Ft

VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY) Start: Complete:

IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY) Start: Complete:

Continued on page two

Figure 3. Notification of Demolition and Renovation

View or download PDF

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:

XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:

XII. WASTE TRANSPORTER #1

Name:

Address

City:	State:	Zip:
Contact Person:		Telephone:

WASTE TRANSPORTER #2

Name:

Address:

City:	State:	Zip:
Contact Person:		Telephone:

XIII. WASTE DISPOSAL SITE

Name:

Location:

City:	State:	Zip:

Telephone:

XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:

Name:	Title:

Authority:

Date of Order (MM/DD/YY):	Date Ordered to Begin (MM/DD/YY):

XV. FOR EMERGENCY RENOVATIONS

Date and Hour of Emergency (MM/DD/YY):

Description of the Sudden, Unexpected Event:

Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:

XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER.

XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)

(Signature of Owner/Operator) (Date)

XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.

(Signature of Owner/Operator) (Date)

Figure 3. Notification of Demolition and Renovation

View or download PDF

[55 FR 48419, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991]

§ 61.146 Standard for spraying.

The owner or operator of an operation in which asbestos-containing materials are spray applied shall comply with the following requirements:

(a) For spray-on application on buildings, structures, pipes, and conduits, do not use material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, except as provided in paragraph (c) of this section.

(b) For spray-on application of materials that contain more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, on equipment and machinery, except as provided in paragraph (c) of this section:

(1) Notify the Administrator at least 20 days before beginning the spraying operation. Include the following information in the notice:

(i) Name and address of owner or operator.

(ii) Location of spraying operation.

(iii) Procedures to be followed to meet the requirements of this paragraph.

(2) Discharge no visible emissions to the outside air from spray-on application of the asbestos-containing material or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(c) The requirements of paragraphs (a) and (b) of this section do not apply to the spray-on application of materials where the asbestos fibers in the materials are encapsulated with a bituminous or resinous binder during spraying and the materials are not friable after drying.

(d) Owners or operators of sources subject to this paragraph are exempt from the requirements of §§61.05(a), 61.07 and 61.09.

[49 FR 13661, Apr. 5, 1984. Redesignated and amended at 55 FR 48424, Nov. 20, 1990; 60 FR 31920, June 19, 1995]

§ 61.147 Standard for fabricating.

(a) *Applicability.* This section applies to the following fabricating operations using commercial asbestos:

(1) The fabrication of cement building products.

(2) The fabrication of friction products, except those operations that primarily install asbestos friction materials on motor vehicles.

(3) The fabrication of cement or silicate board for ventilation hoods; ovens; electrical panels; laboratory furniture, bulkheads, partitions, and ceilings for marine construction; and flow control devices for the molten metal industry.

(b) *Standard.* Each owner or operator of any of the fabricating operations to which this section applies shall either:

(1) Discharge no visible emissions to the outside air from any of the operations or from any building or structure in which they are conducted or from any other fugitive sources; or

(2) Use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(3) Monitor each potential source of asbestos emissions from any part of the fabricating facility, including air cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least 15 seconds duration per source of emissions.

(4) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the Administrator, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(i) Maintenance schedule.

(ii) Recordkeeping plan.

(5) Maintain records of the results of visible emission monitoring and air cleaning device inspections using a format similar to that shown in Figures 1 and 2 and include the following:

(i) Date and time of each inspection.

(ii) Presence or absence of visible emissions.

(iii) Condition of fabric filters, including presence of any tears, holes, and abrasions.

(iv) Presence of dust deposits on clean side of fabric filters.

(v) Brief description of corrective actions taken, including date and time.

(vi) Daily hours of operation for each air cleaning device.

(6) Furnish upon request and make available at the affected facility during normal business hours for inspection by the Administrator, all records required under this section.

(7) Retain a copy of all monitoring and inspection records for at least 2 years.

(8) Submit semiannually a copy of the visible emission monitoring records to the Administrator if visible emission occurred during the report period. Semiannual reports shall be postmarked by the 30th day following the end of the six-month period.

[49 FR 13661, Apr. 5, 1984. Redesignated and amended at 55 FR 48424, Nov. 20, 1991; 64 FR 7467, Feb. 12, 1999]

§ 61.148 Standard for insulating materials.

No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this section do not apply to spray-applied insulating materials regulated under §61.146.

[55 FR 48424, Nov. 20, 1990]

§ 61.149 Standard for waste disposal for asbestos mills.

Each owner or operator of any source covered under the provisions of §61.142 shall:

(a) Deposit all asbestos-containing waste material at a waste disposal site operated in accordance with the provisions of §61.154; and

(b) Discharge no visible emissions to the outside air from the transfer of control device asbestos waste to the tailings conveyor, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air. Dispose of the asbestos waste from control devices in accordance with §61.150(a) or paragraph (c) of this section; and

(c) Discharge no visible emissions to the outside air during the collection, processing, packaging, or on-site transporting of any asbestos-containing waste material, or use one of the disposal methods specified in paragraphs (c) (1) or (2) of this section, as follows:

(1) Use a wetting agent as follows:

(i) Adequately mix all asbestos-containing waste material with a wetting agent recommended by the manufacturer of the agent to effectively wet dust and tailings, before depositing the material at a waste disposal site. Use the agent as recommended for the particular dust by the manufacturer of the agent.

(ii) Discharge no visible emissions to the outside air from the wetting operation or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(iii) Wetting may be suspended when the ambient temperature at the waste disposal site is less than −9.5 °C (15 °F), as determined by an appropriate measurement method with an accuracy of ±1 °C (±2 °F). During periods when wetting operations are suspended, the temperature must be recorded at least at hourly intervals, and records must be retained for at least 2 years in a form suitable for inspection.

(2) Use an alternative emission control and waste treatment method that has received prior written approval by the Administrator. To obtain approval for an alternative method, a written application must be submitted to the Administrator demonstrating that the following criteria are met:

(i) The alternative method will control asbestos emissions equivalent to currently required methods.

(ii) The suitability of the alternative method for the intended application.

(iii) The alternative method will not violate other regulations.

(iv) The alternative method will not result in increased water pollution, land pollution, or occupational hazards.

(d) When waste is transported by vehicle to a disposal site:

(1) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of the waste so that the signs are visible. The markings must:

(i) Be displayed in such a manner and location that a person can easily read the legend.

(ii) Conform to the requirements for 51 cm × 36 cm (20 in × 14 in) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend

DANGER

ASBESTOS DUST HAZARD

CANCER AND LUNG DISEASE HAZARD

Authorized Personnel Only

Notation

2.5 cm (1 inch) Sans Serif, Gothic or Block

2.5 cm (1 inch) Sans Serif, Gothic or Block

1.9 cm (3/4inch) Sans Serif, Gothic or Block

14 Point Gothic

Spacing between any two lines must be a least equal to the height of the upper of the two lines.

(2) For off-site disposal, provide a copy of the waste shipment record, described in paragraph (e)(1) of this section, to the disposal site owner or operator at the same time as the asbestos-containing waste material is delivered to the disposal site.

(e) For all asbestos-containing waste material transported off the facility site:

(1) Maintain asbestos waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

(ii) The name and address of the local, State, or EPA Regional agency responsible for administering the asbestos NESHAP program.

(iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).

(iv) The name and telephone number of the disposal site operator.

(v) The name and physical site location of the disposal site.

(vi) The date transported.

(vii) The name, address, and telephone number of the transporter(s).

(viii) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

(2) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.

(3) Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the

waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:

(i) A copy of the waste shipment record for which a confirmation of delivery was not received, and

(ii) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.

(4) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years.

(f) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.

Generator	1. Work site name and mailing address	Owner's name	Owner's telephone no.
	2. Operator's name and address		Operator's telephone no.
	3. Waste disposal site (WDS) name, mailing address, and physical site location		WDS phone no.
	4. Name, and address of responsible agency		
	5. Description of materials	6. Containers No. Type	7. Total quantity m^3 (yd^3)
	8. Special handling instructions and additional information		
	9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.		
	Printed/typed name & title	Signature	Month Day Year
Transporter	10. Transporter 1 (Acknowledgment of receipt of materials)		
	Printed/typed name & title Address and telephone no.	Signature	Month Day Year
	11. Transporter 2 (Acknowledgment of receipt of materials)		
	Printed/typed name & title Address and telephone no.	Signature	Month Day Year
Disposal Site	12. Discrepancy indication space		
	13. Waste disposal site owner or operator: Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.		
	Printed/typed name & title	Signature	Month Day Year

(Continued)

Figure 4. Waste Shipment Record

View or download PDF

INSTRUCTIONS

Waste Generator Section (Items 1-9)

1. Enter the name of the facility at which asbestos waste is generated and the address where the facility is located. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.

2. If a demolition or renovation, enter the name and address of the company and authorized agent responsible for performing the asbestos removal. In the appropriate spaces, also enter the phone number of the operator.

3. Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the asbestos materials. In the appropriate spaces, also enter the phone number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.

4. Provide the name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.

5. Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is

   - Friable asbestos material
   - Nonfriable asbestos material

6. Enter the number of containers used to transport the asbestos materials listed in item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below):

   DM - Metal drums, barrels
   DP - Plastic drums, barrels
   BA - 6 mil plastic bags or wrapping

7. Enter the quantities of each type of asbestos material removed in units of cubic meters (cubic yards).

8. Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.

9. The authorized agent of the waste generator must read and then sign and date this certification. The date is the date of receipt by transporter.

NOTE: The waste generator must retain a copy of this form.

(continued)

Figure 4. Waste Shipment Record

View or download PDF

Transporter Section (Items 10 & 11)

10. & 11. Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport. Enter date of receipt and signature.

NOTE: The transporter must retain a copy of this form.

Disposal Site Section (Items 12 & 13)

12. The authorized representative of the WDS must note in this space any discrepancy between waste described on this manifest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to nonasbestos material is considered a WDS.

13. The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in item 12. The date is the date of signature and receipt of shipment.

NOTE: The WDS must retain a completed copy of this form. The WDS must also send a completed copy to the operator listed in item 2.

Figure 4. Waste Shipment Record

View or download PDF

§ 61.150 Standard for waste disposal for manufacturing, fabricating, demolition, renovation, and spraying operations.

Each owner or operator of any source covered under the provisions of §§61.144, 61.145, 61.146, and 61.147 shall comply with the following provisions:

(a) Discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, or transporting of any asbestos-containing waste material generated by the source, or use one of the emission control and waste treatment methods specified in paragraphs (a) (1) through (4) of this section.

(1) Adequately wet asbestos-containing waste material as follows:

(i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and

(ii) Discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; and

(iii) After wetting, seal all asbestos-containing waste material in leak-tight containers while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight wrapping; and

(iv) Label the containers or wrapped materials specified in paragraph (a)(1)(iii) of this section using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(4) or 1926.1101(k)(8). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.

(v) For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.

(2) Process asbestos-containing waste material into nonfriable forms as follows:

(i) Form all asbestos-containing waste material into nonfriable pellets or other shapes;

(ii) Discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(3) For facilities demolished where the RACM is not removed prior to demolition according to §§61.145(c)(1) (i), (ii), (iii), and (iv) or for facilities demolished according to §61.145(c)(9), adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this paragraph do not have to be sealed in leak-tight containers or wrapping but may be transported and disposed of in bulk.

(4) Use an alternative emission control and waste treatment method that has received prior approval by the Administrator according to the procedure described in §61.149(c)(2).

(5) As applied to demolition and renovation, the requirements of paragraph (a) of this section do not apply to Category I nonfriable ACM waste and Category II nonfriable ACM waste that did not become crumbled, pulverized, or reduced to powder.

(b) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:

(1) A waste disposal site operated in accordance with the provisions of §61.154, or

(2) An EPA-approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of §61.155.

(3) The requirements of paragraph (b) of this section do not apply to Category I nonfriable ACM that is not RACM.

(c) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must conform to the requirements of §§61.149(d)(1) (i), (ii), and (iii).

(d) For all asbestos-containing waste material transported off the facility site:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

(ii) The name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.

(iii) The approximate quantity in cubic meters (cubic yards).

(iv) The name and telephone number of the disposal site operator.

(v) The name and physical site location of the disposal site.

(vi) The date transported.

(vii) The name, address, and telephone number of the transporter(s).

(viii) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

(2) Provide a copy of the waste shipment record, described in paragraph (d)(1) of this section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site.

(3) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.

(4) Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the

waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:

(i) A copy of the waste shipment record for which a confirmation of delivery was not received, and

(ii) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.

(5) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years.

(e) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.

[55 FR 48429, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991, as amended at 68 FR 54793, Sept. 18, 2003]

§ 61.151 Standard for inactive waste disposal sites for asbestos mills and manufacturing and fabricating operations.

Each owner or operator of any inactive waste disposal site that was operated by sources covered under §61.142, 61.144, or 61.147 and received deposits of asbestos-containing waste material generated by the sources, shall:

(a) Comply with one of the following:

(1) Either discharge no visible emissions to the outside air from an inactive waste disposal site subject to this paragraph; or

(2) Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material. In desert areas where vegetation would be difficult to maintain, at least 8 additional centimeters (3 inches) of well-graded, nonasbestos crushed rock may be placed on top of the final cover instead of vegetation and maintained to prevent emissions; or

(3) Cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste; or

(4) For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in paragraphs (a) (1), (2), and (3) of this section. Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the Administrator to use other equally effective dust suppression agents. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

(b) Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with paragraph (a)(2) or (a)(3) of this section.

(1) Display warning signs at all entrances and at intervals of 100 m (328 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements for 51 cm×36 cm (20&inch;×14&inch;) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend	Notation
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block
Do Not Create Dust	1.9 cm (3/4 inch) Sans Serif, Gothic or Block
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) Fence the perimeter of the site in a manner adequate to deter access by the general public.

(3) When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Administrator to determine whether a fence or a natural barrier adequately deters access by the general public.

(c) The owner or operator may use an alternative control method that has received prior approval of the Administrator rather than comply with the requirements of paragraph (a) or (b) of this section.

(d) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site under this section, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

(e) Within 60 days of a site becoming inactive and after the effective date of this subpart, record, in accordance with State law, a notation on the deed to the facility property and on any other

instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:

(1) The land has been used for the disposal of asbestos-containing waste material;

(2) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in §61.154(f) have been filed with the Administrator; and

(3) The site is subject to 40 CFR part 61, subpart M.

[49 FR 13661, Apr. 5, 1984, as amended at 53 FR 36972, Sept. 23, 1988. Redesignated and amended at 55 FR 48429, Nov. 20, 1990]

§ 61.152 Air-cleaning.

(a) The owner or operator who uses air cleaning, as specified in §§61.142(a), 61.144(b)(2), 61.145(c)(3)(i)(B)(*1*), 61.145(c)(4)(ii), 61.145(c)(11)(i), 61.146(b)(2), 61.147(b)(2), 61.149(b), 61.149(c)(1)(ii), 61.150(a)(1)(ii), 61.150(a)(2)(ii), and 61.155(e) shall:

(1) Use fabric filter collection devices, except as noted in paragraph (b) of this section, doing all of the following:

(i) Ensuring that the airflow permeability, as determined by ASTM Method D737–75, does not exceed 9 m^3 /min/m^2 (30 ft^3 /min/ft^2) for woven fabrics or 11^3 /min/m^2 (35 ft^3 /min/ft^2) for felted fabrics, except that 12 m^3 /min/m^2 (40 ft^3 min/ft^2) for woven and 14 m^3 /min/m^2 (45 ft^3 min/ft^2) for felted fabrics is allowed for filtering air from asbestos ore dryers; and

(ii) Ensuring that felted fabric weighs at least 475 grams per square meter (14 ounces per square yard) and is at least 1.6 millimeters (one-sixteenth inch) thick throughout; and

(iii) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.

(2) Properly install, use, operate, and maintain all air-cleaning equipment authorized by this section. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.

(3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.

(b) There are the following exceptions to paragraph (a)(1):

(1) After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the Administrator determines that a fabric filter is not feasible, the Administrator may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (40 inches water gage pressure).

(2) Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles.

(3) The Administrator may authorize the use of filtering equipment other than described in paragraphs (a)(1) and (b)(1) and (2) of this section if the owner or operator demonstrates to the

Administrator's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.

[49 FR 13661, Apr. 5, 1984; 49 FR 25453, June 21, 1984, as amended at 51 FR 8199, Mar. 10, 1986. Redesignated and amended at 55 FR 48430, Nov. 20, 1990]

§ 61.153 Reporting.

(a) Any new source to which this subpart applies (with the exception of sources subject to §§61.143, 61.145, 61.146, and 61.148), which has an initial startup date preceding the effective date of this revision, shall provide the following information to the Administrator postmarked or delivered within 90 days of the effective date. In the case of a new source that does not have an initial startup date preceding the effective date, the information shall be provided, postmarked or delivered, within 90 days of the initial startup date. Any owner or operator of an existing source shall provide the following information to the Administrator within 90 days of the effective date of this subpart unless the owner or operator of the existing source has previously provided this information to the Administrator. Any changes in the information provided by any existing source shall be provided to the Administrator, postmarked or delivered, within 30 days after the change.

(1) A description of the emission control equipment used for each process; and

(i) If the fabric device uses a woven fabric, the airflow permeability in m^3 /min/m^2 and; if the fabric is synthetic, whether the fill yarn is spun or not spun; and

(ii) If the fabric filter device uses a felted fabric, the density in g/m^2 , the minimum thickness in inches, and the airflow permeability in m^3 /min/m^2 .

(2) If a fabric filter device is used to control emissions,

(i) The airflow permeability in m^3 /min/m^2 (ft^3 /min/ft^2) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and

(ii) If the fabric filter device uses a felted fabric, the density in g/m^2 (oz/yd^2), the minimum thickness in millimeters (inches), and the airflow permeability in m^3 /min/m^2 (ft^3 /min/ft^2).

(3) If a HEPA filter is used to control emissions, the certified efficiency.

(4) For sources subject to §§61.149 and 61.150:

(i) A brief description of each process that generates asbestos-containing waste material; and

(ii) The average volume of asbestos-containing waste material disposed of, measured in m^3 /day (yd^3 /day); and

(iii) The emission control methods used in all stages of waste disposal; and

(iv) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.

(5) For sources subject to §§61.151 and 61.154:

(i) A brief description of the site; and

(ii) The method or methods used to comply with the standard, or alternative procedures to be used.

(b) The information required by paragraph (a) of this section must accompany the information required by §61.10. Active waste disposal sites subject to §61.154 shall also comply with this provision. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of §61.10(a). The information described in this section must be reported using the format of appendix A of this part as a guide.

(Sec. 114. Clean Air Act as amended (42 U.S.C. 7414))

[49 FR 13661, Apr. 5, 1984. Redesignated and amended at 55 FR 48430, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991]

§ 61.154 Standard for active waste disposal sites.

Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under §61.149, 61.150, or 61.155 shall meet the requirements of this section:

(a) Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of paragraph (c) or (d) of this section must be met.

(b) Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of paragraph (c)(1) of this section must be met.

(1) Warning signs must be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements of 51 cm × 36 cm (20&inch;×14&inch;) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend	Notation
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block.
Do Not Create Dust	1.9 cm (3/4 inch) Sans Serif, Gothic or Block.
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.

(3) Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access by the general public.

(c) Rather than meet the no visible emission requirement of paragraph (a) of this section, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

(1) Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, or

(2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

(d) Rather than meet the no visible emission requirement of paragraph (a) of this section, use an alternative emissions control method that has received prior written approval by the Administrator according to the procedures described in §61.149(c)(2).

(e) For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

(ii) The name, address, and telephone number of the transporter(s).

(iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).

(iv) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

(v) The date of the receipt.

(2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

(3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(4) Retain a copy of all records and reports required by this paragraph for at least 2 years.

(f) Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

(g) Upon closure, comply with all the provisions of §61.151.

(h) Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

(i) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under this section.

(j) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

(Secs. 112 and 301(a) of the Clean Air Act as amended (42 U.S.C. 7412, 7601(a))

[49 FR 13661, Apr. 5, 1990. Redesignated and amended at 55 FR 48431, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991]

§ 61.155 Standard for operations that convert asbestos-containing waste material into nonasbestos (asbestos-free) material.

Each owner or operator of an operation that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material shall:

(a) Obtain the prior written approval of the Administrator to construct the facility. To obtain approval, the owner or operator shall provide the Administrator with the following information:

(1) Application to construct pursuant to §61.07.

(2) In addition to the information requirements of §61.07(b)(3), a

(i) Description of waste feed handling and temporary storage.

(ii) Description of process operating conditions.

(iii) Description of the handling and temporary storage of the end product.

(iv) Description of the protocol to be followed when analyzing output materials by transmission electron microscopy.

(3) Performance test protocol, including provisions for obtaining information required under paragraph (b) of this section.

(4) The Administrator may require that a demonstration of the process be performed prior to approval of the application to construct.

(b) Conduct a start-up performance test. Test results shall include:

(1) A detailed description of the types and quantities of nonasbestos material, RACM, and asbestos-containing waste material processed, *e.g.,* asbestos cement products, friable asbestos insulation, plaster, wood, plastic, wire, etc. Test feed is to include the full range of materials that will be encountered in actual operation of the process.

(2) Results of analyses, using polarized light microscopy, that document the asbestos content of the wastes processed.

(3) Results of analyses, using transmission electron microscopy, that document that the output materials are free of asbestos. Samples for analysis are to be collected as 8-hour composite samples (one 200-gram (7-ounce) sample per hour), beginning with the initial introduction of RACM or asbestos-containing waste material and continuing until the end of the performance test.

(4) A description of operating parameters, such as temperature and residence time, defining the full range over which the process is expected to operate to produce nonasbestos (asbestos-free) materials. Specify the limits for each operating parameter within which the process will produce nonasbestos (asbestos-free) materials.

(5) The length of the test.

(c) During the initial 90 days of operation,

(1) Continuously monitor and log the operating parameters identified during start-up performance tests that are intended to ensure the production of nonasbestos (asbestos-free) output material.

(2) Monitor input materials to ensure that they are consistent with the test feed materials described during start-up performance tests in paragraph (b)(1) of this section.

(3) Collect and analyze samples, taken as 10-day composite samples (one 200-gram (7-ounce) sample collected every 8 hours of operation) of all output material for the presence of asbestos. Composite samples may be for fewer than 10 days. Transmission electron microscopy (TEM) shall be used to analyze the output material for the presence of asbestos. During the initial 90-day period, all output materials must be stored on-site until analysis shows the material to be asbestos-free or disposed of as asbestos-containing waste material according to §61.150.

(d) After the initial 90 days of operation,

(1) Continuously monitor and record the operating parameters identified during start-up performance testing and any subsequent performance testing. Any output produced during a period of deviation from the range of operating conditions established to ensure the production of nonasbestos (asbestos-free) output materials shall be:

(i) Disposed of as asbestos-containing waste material according to §61.150, or

(ii) Recycled as waste feed during process operation within the established range of operating conditions, or

(iii) Stored temporarily on-site in a leak-tight container until analyzed for asbestos content. Any product material that is not asbestos-free shall be either disposed of as asbestos-containing waste material or recycled as waste feed to the process.

(2) Collect and analyze monthly composite samples (one 200-gram (7-ounce) sample collected every 8 hours of operation) of the output material. Transmission electron microscopy shall be used to analyze the output material for the presence of asbestos.

(e) Discharge no visible emissions to the outside air from any part of the operation, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(f) Maintain records on-site and include the following information:

(1) Results of start-up performance testing and all subsequent performance testing, including operating parameters, feed characteristic, and analyses of output materials.

(2) Results of the composite analyses required during the initial 90 days of operation under §61.155(c).

(3) Results of the monthly composite analyses required under §61.155(d).

(4) Results of continuous monitoring and logs of process operating parameters required under §61.155 (c) and (d).

(5) The information on waste shipments received as required in §61.154(e).

(6) For output materials where no analyses were performed to determine the presence of asbestos, record the name and location of the purchaser or disposal site to which the output materials were sold or deposited, and the date of sale or disposal.

(7) Retain records required by paragraph (f) of this section for at least 2 years.

(g) Submit the following reports to the Administrator:

(1) A report for each analysis of product composite samples performed during the initial 90 days of operation.

(2) A quarterly report, including the following information concerning activities duringeachconsecutive 3-month period:

(i) Results of analyses of monthly product composite samples.

(ii) A description of any deviation from the operating parameters established during performance testing, the duration of the deviation, and steps taken to correct the deviation.

(iii) Disposition of any product produced during a period of deviation, including whether it was recycled, disposed of as asbestos-containing waste material, or stored temporarily on-site until analyzed for asbestos content.

(iv) The information on waste disposal activities as required in §61.154(f).

(h) Nonasbestos (asbestos-free) output material is not subject to any of the provisions of this subpart. Output materials in which asbestos is detected, or output materials produced when the operating parameters deviated from those established during the start-up performance testing, unless shown by TEM analysis to be asbestos-free, shall be considered to be asbestos-containing waste and shall be handled and disposed of according to §§61.150 and 61.154 or reprocessed while all of the established operating parameters are being met.

[55 FR 48431, Nov. 20, 1990]

§ 61.156 Cross-reference to other asbestos regulations.

In addition to this subpart, the regulations referenced in Table 1 also apply to asbestos and may be applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155 of this subpart. These cross-references are presented for the reader's information and to promote compliance with the cited regulations.

Table 1—Cross-Reference to Other Asbestos Regulations

Agency	CFR citation	Comment
EPA	40 CFR part 763, subpart E	Requires schools to inspect for asbestos and implement response actions and submit asbestos management plans to States. Specifies use of accredited inspectors, air sampling methods, and waste disposal procedures.
	40 CFR part 427	Effluent standards for asbestos manufacturing source categories.

	40 CFR part 763, subpart G	Protects public employees performing asbestos abatement work in States not covered by OSHA asbestos standard.
OSHA	29 CFR 1910.1001	Worker protection measures-engineering controls, worker training, labeling, respiratory protection, bagging of waste, permissible exposure level.
	29 CFR 1926.1101	Worker protection measures for all construction work involving asbestos, including demolition and renovation-work practices, worker training, bagging of waste, permissible exposure level.
MSHA	30 CFR part 56, subpart D	Specifies exposure limits, engineering controls, and respiratory protection measures for workers in surface mines.
	30 CFR part 57, subpart D	Specifies exposure limits, engineering controls, and respiratory protection measures for workers in underground mines.
DOT	49 CFR parts 171 and 172	Regulates the transportation of asbestos-containing waste material. Requires waste containment and shipping papers.

[55 FR 48432, Nov. 20, 1990, as amended at 60 FR 31920, June 19, 1995; 68 FR 54793, Sept. 18, 2003; 69 FR 43324, July 20, 2004]

§ 61.157 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities that will not be delegated to States:

(1) Section 61.149(c)(2)

(2) Section 61.150(a)(4)

(3) Section 61.151(c)

(4) Section 61.152(b)(3)

(5) Section 61.154(d)

(6) Section 61.155(a).

[55 FR 48433, Nov. 20, 1990]

Appendix A to Subpart M of Part 61—Interpretive Rule Governing Roof Removal Operations

I. Applicability of the Asbestos NESHAP

1.1. Asbestos-containing material (ACM) is material containing more than one percent asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy. The NESHAP classifies ACM as either “friable” or “nonfriable”. Friable ACM is ACM that, when dry, can be crumbled, pulverized or reduced to powder by hand

pressure. Nonfriable ACM is ACM that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

1.2. Nonfriable ACM is further classified as either Category I ACM or Category II ACM. Category I ACM and Category II ACM are distinguished from each other by their potential to release fibers when damaged. Category I ACM includes asbestos-containing gaskets, packings, resilient floor coverings, resilient floor covering mastic, and asphalt roofing products containing more than one percent asbestos. Asphalt roofing products which may contain asbestos include built-up roofing; asphalt-containing single ply membrane systems; asphalt shingles; asphalt-containing underlayment felts; asphalt-containing roof coatings and mastics; and asphalt-containing base flashings. ACM roofing products that use other bituminous or resinous binders (such as coal tars or pitches) are also considered to be Category I ACM. Category II ACM includes all other nonfriable ACM, for example, asbestos-cement (A/C) shingles, A/C tiles, and transite boards or panels containing more than one percent asbestos. Generally speaking, Category II ACM is more likely to become friable when damaged than is Category I ACM. The applicability of the NESHAP to Category I and II ACM depends on: (1) the condition of the material at the time of demolition or renovation, (2) the nature of the operation to which the material will be subjected, (3) the amount of ACM involved.

1.3. Asbestos-containing material regulated under the NESHAP is referred to as “regulated asbestos-containing material” (RACM). RACM is defined in §61.141 of the NESHAP and includes: (1) friable asbestos-containing material; (2) Category I nonfriable ACM that has become friable; (3) Category I nonfriable ACM that has been or will be sanded, ground, cut, or abraded; or (4) Category II nonfriable ACM that has already been or is likely to become crumbled, pulverized, or reduced to powder. If the coverage threshold for RACM is met or exceeded in a renovation or demolition operation, then all friable ACM in the operation, and in certain situations, nonfriable ACM in the operation, are subject to the NESHAP.

A. Threshold Amounts of Asbestos-Containing Roofing Material

1.A.1. The NESHAP does not cover roofing projects on single family homes or on residential buildings containing four or fewer dwelling units. 40 CFR 61.141. For other roofing renovation projects, if the total asbestos-containing roof area undergoing renovation is less than 160 ft^2 , the NESHAP does not apply, regardless of the removal method to be used, the type of material (Category I or II), or its condition (friable versus nonfriable). 40 CFR 61.145(a)(4). However, EPA would recommend the use of methods that damage asbestos-containing roofing material as little as possible. EPA has determined that where a rotating blade (RB) roof cutter or equipment that similarly damages the roofing material is used to remove Category I nonfriable asbestos-containing roofing material, the removal of 5580 ft^2 of that material will create 160 ft^2 of RACM. For the purposes of this interpretive rule, “RB roof cutter” means an engine-powered roof cutting machine with one or more rotating cutting blades the edges of which are blunt. (Equipment with blades having sharp or tapered edges, and/or which does not use a rotating blade, is used for “slicing” rather than “cutting” the roofing material; such equipment is not included in the term “RB roof cutter”.) Therefore, it is EPA's interpretation that when an RB roof cutter or equipment that similarly damages the roofing material is used to remove Category I nonfriable asbestos-containing roofing material, any project that is 5580 ft^2 or greater is subject to the NESHAP; conversely, it is EPA's interpretation that when an RB roof cutter or equipment that similarly damages the roofing material is used to remove Category I nonfriable asbestos-

containing roofing material in a roof removal project that is less than 5580 ft^2 , the project is not subject to the NESHAP, except that notification is always required for demolitions. EPA further construes the NESHAP to mean that if slicing or other methods that do not sand, grind, cut or abrade will be used on Category I nonfriable ACM, the NESHAP does not apply, regardless of the area of roof to be removed.

1.A.2. For asbestos cement (A/C) shingles (or other Category II roofing material), if the area of the roofing material to be removed is at least 160 ft^2 and the removal methods will crumble, pulverize, reduce to powder, or contaminate with RACM (from other ACM that has been crumbled, pulverized or reduced to powder) 160 ft^2 or more of such roofing material, the removal is subject to the NESHAP. Conversely, if the area of the A/C shingles (or other Category II roofing materials) to be removed is less than 160 ft^2 , the removal is not subject to the NESHAP regardless of the removal method used, except that notification is always required for demolitions. 40 CFR 61.145(a). However, EPA would recommend the use of methods that damage asbestos-containing roofing material as little as possible. If A/C shingles (or other Category II roofing materials) are removed without 160 ft^2 or more of such roofing material being crumbled, pulverized, reduced to powder, or contaminated with RACM (from other ACM that has been crumbled, pulverized or reduced to powder), the operation is not subject to the NESHAP, even where the total area of the roofing material to be removed exceeds 160 ft^2 ; provided, however, that if the renovation includes other operations involving RACM, the roof removal operation is covered if the total area of RACM from all renovation activities exceeds 160 ft^2 . *See* the definition of regulated asbestos-containing material (RACM), 40 CFR 61.141.

1.A.3. Only roofing material that meets the definition of ACM can qualify as RACM subject to the NESHAP. Therefore, to determine if a removal operation that meets or exceeds the coverage threshold is subject to the NESHAP, any suspect roofing material (*i.e.* roofing material that may be ACM) should be tested for asbestos. If any such roofing material contains more than one percent asbestos and if the removal operation is covered by the NESHAP, then EPA must be notified and the work practices in §61.145(c) must be followed. In EPA's view, if a removal operation involves at least the threshold level of suspect material, a roofing contractor may choose not to test for asbestos if the contractor follows the notification and work practice requirements of the NESHAP.

B. A/C Shingle Removal (Category II ACM Removal)

1.B.1. A/C shingles, which are Category II nonfriable ACM, become regulated ACM if the material has a high probability of becoming or has become crumbled, pulverized or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations. 40 CFR 61.141. However, merely breaking an A/C shingle (or any other category II ACM) that is not friable may not necessarily cause the material to become RACM. A/C shingles are typically nailed to buildings on which they are attached. EPA believes that the extent of breakage that will normally result from carefully removing A/C shingles and lowering the shingles to the ground will not result in crumbling, pulverizing or reducing the shingles to powder. Conversely, the extent of breakage that will normally occur if the A/C shingles are dropped from a building or scraped off of a building with heavy machinery would cause the shingles to become RACM. EPA therefore construes the NESHAP to mean that the removal of A/C shingles that are not friable, using methods that do not crumble, pulverize, or reduce the A/C shingles to powder (such as pry bars, spud bars and shovels to carefully pry the material), is

not subject to the NESHAP provided that the A/C shingles are properly handled during and after removal, as discussed in this paragraph and the asbestos NESHAP. This interpretation also applies to other Category II nonfriable asbestos-containing roofing materials.

C. Cutting vs. Slicing and Manual Methods for Removal of Category I ACM

1.C.1. Because of damage to the roofing material, and the potential for fiber release, roof removal operations using rotating blade (RB) roof cutters or other equipment that sand, grind, cut or abrade the roof material are subject to the NESHAP. As EPA interprets the NESHAP, the use of certain manual methods (using equipment such as axes, hatchets, or knives, spud bars, pry bars, and shovels, but not saws) or methods that slice, shear, or punch (using equipment such as a power slicer or power plow) does not constitute "cutting, sanding, grinding or abrading." This is because these methods do not destroy the structural matrix or integrity of the material such that the material is crumbled, pulverized or reduced to powder. Hence, it is EPA's interpretation that when such methods are used, assuming the roof material is not friable, the removal operation is not subject to the regulation.

1.C.2. Power removers or power tear-off machines are typically used to pry the roofing material up from the deck after the roof membrane has been cut. It is EPA's interpretation that when these machines are used to pry roofing material up, their use is not regulated by the NESHAP.

1.C.3. As noted previously, the NESHAP only applies to the removal of asbestos-containing roofing materials. Thus, the NESHAP does not apply to the use of RB cutters to remove non-asbestos built up roofing (BUR). On roofs containing some asbestos-containing and some non-asbestos-containing materials, coverage under the NESHAP depends on the methods used to remove each type of material in addition to other coverage thresholds specified above. For example, it is not uncommon for existing roofs to be made of non-asbestos BUR and base flashings that do contain asbestos. In that situation, EPA construes the NESHAP to be inapplicable to the removal of the non-asbestos BUR using an RB cutter so long as the RB cutter is not used to cut 5580 ft^2 or more of the asbestos-containing base flashing or other asbestos-containing material into sections. In addition, the use of methods that slice, shear, punch or pry could then be used to remove the asbestos flashings and not trigger coverage under the NESHAP.

II. Notification

2.1. Notification for a demolition is always required under the NESHAP. However, EPA believes that few roof removal jobs constitute "demolitions" as defined in the NESHAP (§61.141). In particular, it is EPA's view that the removal of roofing systems (i.e., the roof membrane, insulation, surfacing, coatings, flashings, mastic, shingles, and felt underlayment), when such removal is not a part of a demolition project, constitutes a "renovation" under the NESHAP. If the operation is a renovation, and Category I roofing material is being removed using either manual methods or slicing, notification is not required by the NESHAP. If Category II material is not friable and will be removed without crumbling, pulverizing, or reducing it to powder, no notification is required. Also, if the renovation involves less than the threshold area for applicability as discussed above, then no notification is required. However, if a roof removal meets the applicability and threshold requirements under the NESHAP, then EPA (or the delegated agency) must be notified in advance of the removal in accordance with the requirements of §61.145(b), as follows:

• Notification must be given in writing at least 10 working days in advance and must include the information in §61.145(b)(4), except for emergency renovations as discussed below.

• The notice must be updated as necessary, including, for example, when the amount of asbestos-containing roofing material reported changes by 20 percent or more.

• EPA must be notified if the start date of the roof removal changes. If the start date of a roof removal project is changed to an earlier date, EPA must be provided with a written notice of the new start date at least 10 working days in advance. If the start date changes to a later date, EPA must be notified by telephone as soon as possible before the original start date and a written notice must be sent as soon as possible.

• For emergency renovations (as defined in §61.141), where work must begin immediately to avoid safety or public health hazards, equipment damage, or unreasonable financial burden, the notification must be postmarked or delivered to EPA as soon as possible, but no later than the following work day.

III. Emission Control Practices

A. Requirements To Adequately Wet and Discharge No Visible Emission

3.A.1. The principal controls contained in the NESHAP for removal operations include requirements that the affected material be adequately wetted, and that asbestos waste be handled, collected, and disposed of properly. The requirements for disposal of waste materials are discussed separately in section IV below. The emission control requirements discussed in this section III apply only to roof removal operations that are covered by the NESHAP as set forth in Section I above.

3.A.2. For any operation subject to the NESHAP, the regulation (§§61.145(c)(2)(i), (3), (6)(i)) requires that RACM be adequately wet (as defined in §61.141) during the operation that damages or disturbs the asbestos material until collected for disposal.

3.A.3. When using an RB roof cutter (or any other method that sands, grinds, cuts or abrades the roofing material) to remove Category I asbestos-containing roofing material, the emission control requirements of §61.145(c) apply as discussed in Section I above. EPA will consider a roof removal project to be in compliance with the “adequately wet” and “discharge no visible emission” requirements of the NESHAP if the RB roof cutter is equipped and operated with the following: (1) a blade guard that completely encloses the blade and extends down close to the roof surface; and (2) a device for spraying a fine mist of water inside the blade guard, and which device is in operation during the cutting of the roof.

B. Exemptions From Wetting Requirements

3.B.1. The NESHAP provides that, in certain instances, wetting may not be required during the cutting of Category I asbestos roofing material with an RB roof cutter. If EPA determines in accordance with §61.145(c)(3)(i), that wetting will unavoidably damage the building, equipment inside the building, or will present a safety hazard while stripping the ACM from a facility component that remains in place, the roof removal operation will be exempted from the requirement to wet during cutting. EPA must have sufficient written information on which to

base such a decision. Before proceeding with a dry removal, the contractor must have received EPA's written approval. Such exemptions will be made on a case-by-case basis.

3.B.2. It is EPA's view that, in most instances, exemptions from the wetting requirements are not necessary. Where EPA grants an exemption from wetting because of the potential for damage to the building, damage to equipment within the building or a safety hazard, the NESHAP specifies alternative control methods (§61.145(c)(3)(i)(B)). Alternative control methods include (a) the use of local exhaust ventilation systems that capture the dust, and do not produce visible emissions, or (b) methods that are designed and operated in accordance with the requirements of §61.152, or (c) other methods that have received the written approval of EPA. EPA will consider an alternative emission control method in compliance with the NESHAP if the method has received written approval from EPA and the method is being implemented consistent with the approved procedures (§61.145(c)(3)(ii) or §61.152(b)(3)).

3.B.3. An exemption from wetting is also allowed when the air or roof surface temperature at the point of wetting is below freezing, as specified in §61.145(c)(7). If freezing temperatures are indicated as the reason for not wetting, records must be kept of the temperature at the beginning, middle and end of the day on which wetting is not performed and the records of temperature must be retained for at least 2 years. 42 CFR §61.145(c)(7)(iii). It is EPA's interpretation that in such cases, no written application to, or written approval by the Administrator is needed for using emission control methods listed in §61.145(c)(3)(i)(B), or alternative emission control methods that have been previously approved by the Administrator. However, such written application or approval is required for alternative emission control methods that have not been previously approved. Any dust and debris collected from cutting must still be kept wet and placed in containers. All of the other requirements for notification and waste disposal would continue to apply as described elsewhere in this notice and the Asbestos NESHAP.

C. Waste Collection and Handling

3.C.1. It is EPA's interpretation that waste resulting from slicing and other methods that do not cut, grind, sand or abrade Category I nonfriable asbestos-containing roofing material is not subject to the NESHAP and can be disposed of as nonasbestos waste. EPA further construes the NESHAP to provide that if Category II roofing material (such as A/C shingles) is removed and disposed of without crumbling, pulverizing, or reducing it to powder, the waste from the removal is not subject to the NESHAP waste disposal requirements. EPA also interprets the NESHAP to be inapplicable to waste resulting from roof removal operations that do not meet or exceed the coverage thresholds described in section I above. Of course, other State, local, or Federal regulations may apply.

3.C.2. It is EPA's interpretation that when an RB roof cutter, or other method that similarly damages the roofing material, is used to cut Category I asbestos containing roofing material, the damaged material from the cut (the sawdust or debris) is considered asbestos containing waste subject to §61.150 of the NESHAP, provided the coverage thresholds discussed above in section 1 are met or exceeded. This sawdust or debris must be disposed of at a disposal site operated in accordance with the NESHAP. It is also EPA's interpretation of the NESHAP that if the remainder of the roof is free of the sawdust and debris generated by the cutting, or if such sawdust or debris is collected as discussed below in paragraphs 3.C.3, 3.C.4, 3.C.5 and 3.C.6, the remainder of the roof can be disposed of as nonasbestos waste because it is considered to be

Category I nonfriable material (as long as the remainder of the roof is in fact nonasbestos material or if it is Category I asbestos material and the removal methods do not further sand, grind, cut or abrade the roof material). EPA further believes that if the roof is not cleaned of such sawdust or debris, *i.e.,* it is contaminated, then it must be treated as asbestos-containing waste material and be handled in accordance with §61.150.

3.C.3. In order to be in compliance with the NESHAP while using an RB roof cutter (or device that similarly damages the roofing material) to cut Category I asbestos containing roofing material, the dust and debris resulting from the cutting of the roof should be collected as soon as possible after the cutting operation, and kept wet until collected and placed in leak-tight containers. EPA believes that where the blade guard completely encloses the blade and extends down close to the roof surface and is equipped with a device for spraying a fine mist of water inside the blade guard, and the spraying device is in operation during the cutting, most of the dust and debris from cutting will be confined along the cut. The most efficient methods to collect the dust and debris from cutting are to immediately collect or vacuum up the damaged material where it lies along the cut using a filtered vacuum cleaner or debris collector that meets the requirements of 40 CFR 61.152 to clean up as much of the debris as possible, or to gently sweep up the bulk of the debris, and then use a filtered vacuum cleaner that meets the requirements of 40 CFR 61.152 to clean up as much of the remainder of the debris as possible. On smooth surfaced roofs (nonaggregate roofs), sweeping up the debris and then wet wiping the surface may be done in place of using a filtered vacuum cleaner. It is EPA's view that if these decontamination procedures are followed, the remaining roofing material does not have to be collected and disposed of as asbestos waste. Additionally, it is EPA's view that where such decontamination procedures are followed, if the remaining portions of the roof are non-asbestos or Category I nonfriable asbestos material, and if the remaining portions are removed using removal methods that slice, shear, punch or pry, as discussed in section 1.C above, then the remaining portions do not have to be collected and disposed of as asbestos waste and the NESHAP's no visible emissions and adequately wet requirements are not applicable to the removal of the remaining portions. In EPA's interpretation, the failure of a filtered vacuum cleaner or debris collector to collect larger chunks or pieces of damaged roofing material created by the RB roof cutter does not require the remaining roofing material to be handled and disposed of as asbestos waste, provided that such visible chunks or pieces of roofing material are collected (e.g. by gentle sweeping) and disposed of as asbestos waste. Other methods of decontamination may not be adequate, and should be approved by the local delegated agency.

3.C.4. In EPA's interpretation, if the debris from the cutting is not collected immediately, it will be necessary to lightly mist the dust or debris, until it is collected, as discussed above, and placed in containers. The dust or debris should be lightly misted frequently enough to prevent the material from drying, and to prevent airborne emissions, prior to collection as described above. It is EPA's interpretation of the NESHAP that if these procedures are followed, the remaining roofing material does not have to be collected and disposed of as asbestos waste, as long as the remaining roof material is in fact nonasbestos material or if it is Category I asbestos material and the removal methods do not further sand, grind, cut or abrade the roof material.

3.C.5. It is EPA's interpretation that, provided the roofing material is not friable prior to the cutting operation, and provided the roofing material has not been made friable by the cutting operation, the appearance of rough, jagged or damaged edges on the remaining roofing material, due to the use of an RB roof cutter, does not require that such remaining roofing material be

handled and disposed of as asbestos waste. In addition, it is also EPA's interpretation that if the sawdust or debris generated by the use of an RB roof cutter has been collected as discussed in paragraphs 3.C.3, 3.C.4 and 3.C.6, the presence of dust along the edge of the remaining roof material does not render such material "friable" for purposes of this interpretive rule or the NESHAP, provided the roofing material is not friable prior to the cutting operation, and provided that the remaining roofing material near the cutline has not been made friable by the cutting operation. Where roofing material near the cutline has been made friable by the use of the RB cutter (*i.e.* where such remaining roofing material near the cutline can be crumbled, pulverized or reduced to powder using hand pressure), it is EPA's interpretation that the use of an encapsulant will ensure that such friable material need not be treated or disposed of as asbestos containing waste material. The encapsulant may be applied to the friable material after the roofing material has been collected into stacks for subsequent disposal as nonasbestos waste. It is EPA's view that if the encapsulation procedure set forth in this paragraph is followed in operations where roofing material near the cutline has been rendered friable by the use of an RB roof cutter, and if the decontamination procedures set forth in paragraph 3.C.3 have been followed, the NESHAP's no visible emissions and adequately wet requirements would be met for the removal, handling and disposal of the remaining roofing material.

3.C.6. As one way to comply with the NESHAP, the dust and debris from cutting can be placed in leak-tight containers, such as plastic bags, and the containers labeled using warning labels required by OSHA (29 CFR 1926.58). In addition, the containers must have labels that identify the waste generator (such as the name of the roofing contractor, abatement contractor, and/or building owner or operator) and the location of the site at which the waste was generated.

IV. Waste Disposal

A. Disposal Requirements

4.A.1. Section 61.150(b) requires that, as soon as is practical, all collected dust and debris from cutting as well as any contaminated roofing squares, must be taken to a landfill that is operated in accordance with §61.154 or to an EPA-approved site that converts asbestos waste to nonasbestos material in accordance with §61.155. During the loading and unloading of affected waste, asbestos warning signs must be affixed to the vehicles.

B. Waste Shipment Record

4.B.1. For each load of asbestos waste that is regulated under the NESHAP, a waste shipment record (WSR) must be maintained in accordance with §61.150(d). Information that must be maintained for each waste load includes the following:

• Name, address, and telephone number of the waste generator

• Name and address of the local, State, or EPA regional office responsible for administering the asbestos NESHAP program

• Quantity of waste in cubic meters (or cubic yards)

• Name and telephone number of the disposal site operator

• Name and physical site location of the disposal site

• Date transported

• Name, address, and telephone number of the transporter(s)

• Certification that the contents meet all government regulations for transport by highways.

4.B.2. The waste generator is responsible for ensuring that a copy of the WSR is delivered to the disposal site along with the waste shipment. If a copy of the WSR signed by the disposal site operator is not returned to the waste generator within 35 days, the waste generator must contact the transporter and/or the disposal site to determine the status of the waste shipment. 40 CFR 61.150(d)(3). If the signed WSR is not received within 45 days, the waste generator must report, in writing, to the responsible NESHAP program agency and send along a copy of the WSR. 40 CFR 61.150(d)(4). Copies of WSRs, including those signed by the disposal site operator, must be retained for at least 2 years. 40 CFR 61.150(d)(5).

V. Training

5.1. For those roof removals that are subject to the NESHAP, at least one on-site supervisor trained in the provisions of the NESHAP must be present during the removal of the asbestos roofing material. 40 CFR 61.145(c)(8). In EPA's view, this person can be a job foreman, a hired consultant, or someone who can represent the building owner or contractor responsible for the removal. In addition to the initial training requirement, a refresher training course is required every 2 years. The NESHAP training requirements became effective on November 20, 1991.

5.2. Asbestos training courses developed specifically to address compliance with the NESHAP in roofing work, as well as courses developed for other purposes can satisfy this requirement of the NESHAP, as long as the course covers the areas specified in the regulation. EPA believes that Asbestos Hazard Emergency Response Act (AHERA) training courses will, for example, satisfy the NESHAP training requirements. However, nothing in this interpretive rule or in the NESHAP shall be deemed to require that roofing contractors or roofing workers performing operations covered by the NESHAP must be trained or accredited under AHERA, as amended by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). Likewise, state or local authorities may independently impose additional training, licensing, or accreditation requirements on roofing contractors performing operations covered by the NESHAP, but such additional training, licensing or accreditation is not called for by this interpretive rule or the federal NESHAP.

5.3. For removal of Category I asbestos containing roofing material where RB roof cutters or equipment that similarly damages the asbestos-containing roofing material are used, the NESHAP training requirements (§61.145(c)(8)) apply as discussed in Section I above. It is EPA's intention that removal of Category I asbestos-containing roofing material using hatchets, axes, knives, and/or the use of spud bars, pry bars and shovels to lift the roofing material, or similar removal methods that slice, punch, or shear the roof membrane are not subject to the training requirements, since these methods do not cause the roof removal to be subject to the NESHAP. Likewise, it is EPA's intention that roof removal operations involving Category II nonfriable ACM are not subject to the training requirements where such operations are not subject to the NESHAP as discussed in section I above.

[59 FR 31158, June 17, 1994, as amended at 60 FR 31920, June 19, 1995]

Appendix F: 40 CFR 63 Subpart FFFF

NESHAP Subpart FFFF (40 CFR 63.2430-63.2550)
National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

This subpart applies to the following emission points:
SEP-055
SEP-057
SEP-058
SEP-059
SEP-060
SEP-069
SEP-070
SEP-071
SEP-072
SEP-073
SEP-074
SEP-075
SEP-076
SEP-077
SEP-080
SEP-081
SEP-082

Updated 7/19/06

Source: Federal Register dated 11/10/03

Subpart FFFF--National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

What This Subpart Covers
63.2430 What is the purpose of this subpart?
63.2435 Am I subject to the requirements in this subpart?
63.2440 What parts of my plant does this subpart cover?

Compliance Dates
63.2445 When do I have to comply with this subpart?

Emission Limits, Work Practice Standards, and Compliance Requirements
63.2450 What are my general requirements for complying with this subpart?
63.2455 What requirements must I meet for continuous process vents?
63.2460 What requirements must I meet for batch process vents?
63.2465 What requirements must I meet for process vents that emit hydrogen halide and halogen HAP or PM HAP?
63.2470 What requirements must I meet for storage tanks?
63.2475 What requirements must I meet for transfer racks?
63.2480 What requirements must I meet for equipment leaks?
63.2485 What requirements must I meet for wastewater streams and liquid streams in open systems within an MCPU?
63.2490 What requirements must I meet for heat exchange systems?

Alternative Means of Compliance
63.2495 How do I comply with the pollution prevention standard?
63.2500 How do I comply with emissions averaging?
63.2505 How do I comply with the alternative standard?

Notifications, Reports, and Records
63.2515 What notifications must I submit and when?
63.2520 What reports must I submit and when?
63.2525 What records must I keep?

Other Requirements and Information
63.2535 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?
63.2540 What parts of the General Provisions apply to me?
63.2545 Who implements and enforces this subpart?
63.2550 What definitions apply to this subpart?

Tables to Subpart FFFF of Part 63
Table 1 to Subpart FFFF of Part 63--Emission Limits and Work Practice Standards for Continuous Process Vents
Table 2 to Subpart FFFF of Part 63--Emission Limits and Work Practice Standards for Batch Process Vents

Table 3 to Subpart FFFF of Part 63--Emission Limits for Hydrogen Halide and Halogen HAP Emissions or PM HAP Emissions from Process Vents
Table 4 to Subpart FFFF of Part 63--Emission Limits for Storage Tanks
Table 5 to Subpart FFFF of Part 63--Emission Limits and Work Practice Standards for Transfer Racks
Table 6 to Subpart FFFF of Part 63--Requirements for Equipment Leaks
Table 7 to Subpart FFFF of Part 63--Requirements for Wastewater Streams and Liquid Streams in Open Systems Within an MCPU
Table 8 to Subpart FFFF of Part 63--Partially Soluble Hazardous Air Pollutants
Table 9 to Subpart FFFF of Part 63--Soluble Hazardous Air Pollutants
Table 10 to Subpart FFFF of Part 63--Requirements for Heat Exchange Systems
Table 11 to Subpart FFFF of Part 63--Requirements for Reports

Appendix A to Subpart FFFF of Part 63--Applicability of General Provisions (Subpart A) to Subpart FFFF of Part 63

Sec. 63.2430 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous organic chemical manufacturing. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits, operating limits, and work practice standards.

Sec. 63.2435 Am I subject to the requirements in this subpart?

(a) You are subject to the requirements in this subpart if you own or operate miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source of hazardous air pollutants (HAP) emissions as defined in section 112(a) of the Clean Air Act (CAA).

(b) An MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process, as defined in Sec. 63.2550, that satisfies all of the conditions specified in paragraphs (b)(1) through (3) of this section. An MCPU also includes any assigned storage tanks and transfer racks; equipment in open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described in paragraphs (b)(1)(i) through (v) of this section.

(1) The MCPU produces material or family of materials that is described in paragraph (b)(1)(i), (ii), (iii), (iv), or (v) of this section.

(i) An organic chemical(s) classified using the 1987 version of SIC code 282, 283, 284, 285, 286, 287, 289, or 386, except as provided in paragraph (c)(5) of this section.

(ii) An organic chemical(s) classified using the 1997 version of NAICS code 325, except as provided in paragraph (c)(5) of this section.

(iii) Quaternary ammonium compounds and ammonium sulfate produced with caprolactam.

(iv) Hydrazine.

(v) Organic solvents classified in any of the SIC or NAICS codes listed in paragraph (b)(1)(i) or (ii) of this section that are recovered using nondedicated solvent recovery operations.

(2) The MCPU processes, uses, or generates any of the organic HAP listed in section 112(b) of the CAA or hydrogen halide and halogen HAP, as defined in Sec. 63.2550.

(3) The MCPU is not an affected source or part of an affected source under another subpart of this part 63, except for process vents from batch operations within a chemical manufacturing process unit (CMPU), as identified in Sec. 63.100(j)(4). For this situation, the MCPU is the same as the CMPU as

defined in Sec. 63.100, and you are subject only to the requirements for batch process vents in this subpart.

(c) The requirements in this subpart do not apply to the operations specified in paragraphs (c)(1) through (7) of this section.

(1) Research and development facilities, as defined in section 112(c)(7) of the CAA.

(2) The manufacture of ammonium sulfate as a by-product, if the slurry entering the by-product manufacturing process contains 50 parts per million by weight (ppmw) HAP or less or 10 ppmw benzene or less. You must retain information, data, and analysis to document the HAP concentration in the entering slurry in order to claim this exemption.

(3) The affiliated operations located at an affected source under subparts GG (National Emission Standards for Aerospace Manufacturing and Rework Facilities), KK (National Emission Standards for the Printing and Publishing Industry), JJJJ (NESHAP: Paper and Other Web Coating), future MMMM (NESHAP: Surface Coating of Miscellaneous Metal Parts and Products), and SSSS (NESHAP: Surface Coating of Metal Coil) of this part 63. Affiliated operations include, but are not limited to, mixing or dissolving of coating ingredients; coating mixing for viscosity adjustment, color tint or additive blending, or pH adjustment; cleaning of coating lines and coating line parts; handling and storage of coatings and solvent; and conveyance and treatment of wastewater.

(4) Fabricating operations (such as spinning or compressing a solid polymer into its end use); compounding operations (in which blending, melting, and resolidification of a solid polymer product occur for the purpose of incorporating additives, colorants, or stabilizers); and extrusion and drawing operations (converting an already produced solid polymer into a different shape by melting or mixing the polymer and then forcing it or pulling it through an orifice to create an extruded product). An operation is not exempt if it involves processing with HAP solvent or if an intended purpose of the operation is to remove residual HAP monomer.

(5) Production activities described using the 1997 version of NAICS codes 325131, 325181, 325188 (except the requirements do apply to hydrazine), 325314, 325991 (except the requirements do apply to reformulating plastics resins from recycled plastics products), and 325992 (except the requirements do apply to photographic chemicals).

(6) Tall oil recovery systems.

(7) Carbon monoxide production.

(d) If the predominant use of a transfer rack loading arm or storage tank (including storage tanks in series) is associated with a miscellaneous organic chemical manufacturing process, and the loading arm or storage tank is not part of an affected source under a subpart of this part 63, then you must assign the loading arm or storage tank to the MCPU for that miscellaneous organic chemical manufacturing process. If the predominant use cannot be determined, then you may assign the loading arm or storage tank to any MCPU that shares it and is subject to this subpart. If the use varies from year to year, then you must base the determination on the utilization that occurred during the year preceding November 10, 2003 or, if the loading arm or storage tank was not in operation during that year, you must base the use on the expected use for the first 5-year period after startup. You must include the determination in the notification of compliance status report specified in Sec. 63.2520(d). You must redetermine the primary use at least once every 5 years, or any time you implement emissions averaging or pollution prevention after the compliance date.

(e) For nondedicated equipment used to create at least one MCPU, you may elect to develop process unit groups (PUG), determine the primary product of each PUG, and comply with the requirements of the subpart in 40 CFR part 63 that applies to that primary product as specified in Sec. 63.2535(l).

Sec. 63.2440 What parts of my plant does this subpart cover?

(a) This subpart applies to each miscellaneous organic chemical manufacturing affected source.

(b) The miscellaneous organic chemical manufacturing affected source is the facilitywide collection of MCPU and heat exchange systems, wastewater, and waste management units that are associated with manufacturing materials described in Sec. 63.2435(b)(1).

(c) A new affected source is described by either paragraph (c)(1) or (2) of this section.

(1) Each affected source defined in paragraph (b) of this section for which you commenced construction or reconstruction after April 4, 2002, and you meet the applicability criteria at the time you commenced construction or reconstruction.

(2) Each dedicated MCPU that has the potential to emit 10 tons per year (tpy) of any one HAP or 25 tpy of combined HAP, and you commenced construction or reconstruction of the MCPU after April 4, 2002. For the purposes of this paragraph, an MCPU is an affected source in the definition of the term ``reconstruction'' in Sec. 63.2.

(d) An MCPU that is also a CMPU under Sec. 63.100 is reconstructed for the purposes of this subpart if, and only if, the CMPU meets the requirements for reconstruction in Sec. 63.100(l)(2).

Sec. 63.2445 When do I have to comply with this subpart?

(a) If you have a new affected source, you must comply with this subpart according to the requirements in paragraphs (a)(1) and (2) of this section.

(1) If you startup your new affected source before November 10, 2003, then you must comply with the requirements for new sources in this subpart no later than November 10, 2003.

(2) If you startup your new affected source after November 10, 2003, then you must comply with the requirements for new sources in this subpart upon startup of your affected source.

(b) If you have an existing source on November 10, 2003, you must comply with the requirements for existing sources in this subpart no later than May 10, 2008.

(c) You must meet the notification requirements in Sec. 63.2515 according to the dates specified in that section and in subpart A of this part 63. Some of the notifications must be submitted before you are required to comply with the emission limits, operating limits, and work practice standards in this subpart.

(d) If you have a Group 2 emission point that becomes a Group 1 emission point after the compliance date for your affected source, you must comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

(e) If, after the compliance date for your affected source, hydrogen halide and halogen HAP emissions from process vents in a process increase to more than 1,000 lb/yr, or HAP metals emissions from a process at a new affected source increase to more than 150 lb/yr, you must comply with the applicable emission limits specified in Table 3 to this subpart and the associated compliance requirements beginning on
the date the emissions exceed the applicable threshold. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

(f) If you have a small control device for process vent or transfer rack emissions that becomes a large control device, as defined in Sec.
63.2550(i), you must comply with monitoring and associated recordkeeping and reporting requirements for large control devices beginning on the date the switch occurs. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

Sec. 63.2450 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits and work practice standards in Tables 1 through 7 to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in Sec. Sec. 63.2455 through 63.2490 (or the alternative means of compliance in Sec. 63.2495, Sec. 63.2500, or Sec. 63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in Sec. Sec. 63.2515, 63.2520, and 63.2525.

(b) Determine halogenated vent streams. You must determine if an emission stream is a halogenated vent stream, as defined in Sec. 63.2550, by calculating the mass emission rate of halogen atoms in accordance with Sec. 63.115(d)(2)(v). Alternatively, you may elect to designate the emission stream as halogenated.

(c) Requirements for combined emission streams. When organic HAP emissions from different emission types (e.g., continuous process vents, batch process vents, storage tanks, transfer operations, and waste management units) are combined, you must comply with the requirements of either paragraph (c)(1) or (2) of this section.

(1) Comply with the applicable requirements of this subpart for each kind of organic HAP emissions in the stream (e.g., the requirements of Table 1 to this subpart for continuous process vents and the requirements of Table 4 to this subpart for emissions from storage tanks).

(2) Determine the applicable requirements based on the hierarchy presented in paragraphs (c)(2)(i) through (vi) of this section. For a combined stream, the applicable requirements are specified in the highest-listed paragraph in the hierarchy that applies to any of the individual streams that make up the combined stream. For example, if a combined stream consists of emissions from Group 1 batch process vents and any other type of emission stream, then you must comply with the requirements in paragraph (c)(2)(i) of this section for the combined stream; compliance with the requirements in paragraph (c)(2)(i) of this section constitutes compliance for the other emission streams in the combined stream. Two exceptions are that you must comply with the requirements in Table 3 to this subpart and Sec. 63.2465 for all process vents with hydrogen halide and halogen HAP emissions, and recordkeeping requirements for Group 2 applicability or compliance are still required (e.g., the requirement in Sec. 63.2525(f) to track the number of batches produced and calculate rolling annual emissions for processes with Group 2 batch process vents).

(i) The requirements of Table 2 to this subpart and Sec. 63.2460 for Group 1 batch process vents, including applicable monitoring, recordkeeping, and reporting.

(ii) The requirements of Table 1 to this subpart and Sec. 63.2455 for continuous process vents that are routed to a control device, as defined in Sec. 63.981, including applicable monitoring, recordkeeping, and reporting.

(iii) The requirements of Table 5 to this subpart and Sec. 63.2475 for transfer operations, including applicable monitoring, recordkeeping, and reporting.

(iv) The requirements of Table 7 to this subpart and Sec. 63.2485 for emissions from waste management units that are used to manage and treat Group 1 wastewater streams and residuals from Group 1 wastewater streams, including applicable monitoring, recordkeeping, and reporting.

(v) The requirements of Table 4 to this subpart and Sec. 63.2470 for control of emissions from storage tanks, including applicable monitoring, recordkeeping, and reporting.

(vi) The requirements of Table 1 to this subpart and Sec. 63.2455 for continuous process vents after a recovery device including applicable monitoring, recordkeeping, and reporting.

(d) [Reserved]

(e) Requirements for control devices.

(1) Except when complying with Sec. 63.2485, if you reduce organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or

recovery devices, you must meet the requirements of Sec. 63.982(c) and the requirements referenced therein.

(2) Except when complying with Sec. 63.2485, if you reduce organic HAP emissions by venting emissions through a closed-vent system to a flare, you must meet the requirements of Sec. 63.982(b) and the requirements referenced therein.

(3) If you use a halogen reduction device to reduce hydrogen halide and halogen HAP emissions from halogenated vent streams, you must meet the requirements of Sec. 63.994 and the requirements referenced therein. If you use a halogen reduction device before a combustion device, you must determine the halogen atom emission rate prior to the combustion device according to the procedures in Sec. 63.115(d)(2)(v).

(f) Requirements for flare compliance assessments.

(1) As part of a flare compliance assessment required in Sec. 63.987(b), you have the option of demonstrating compliance with the requirements of Sec. 63.11(b) by complying with the requirements in either Sec. 63.11(b)(6)(i) or Sec. 63.987(b)(3)(ii).

(2) If you elect to meet the requirements in Sec. 63.11(b)(6)(i), you must keep flare compliance assessment records as specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) Keep records as specified in Sec. 63.998(a)(1)(i), except that a record of the heat content determination is not required.

(ii) Keep records of the flare diameter, hydrogen content, exit velocity, and maximum permitted velocity. Include these records in the flare compliance report required in Sec. 63.999(a)(2).

(g) Requirements for performance tests. The requirements specified in paragraphs (g)(1) through (5) of this section apply instead of or in addition to the requirements specified in subpart SS of this part 63.

(1) Conduct gas molecular weight analysis using Method 3, 3A, or 3B in appendix A to part 60 of this chapter.

(2) Measure moisture content of the stack gas using Method 4 in appendix A to part 60 of this chapter.

(3) If the uncontrolled or inlet gas stream to the control device contains carbon disulfide, you must conduct emissions testing according to paragraph (g)(3)(i) or (ii) of this section.

(i) If you elect to comply with the percent reduction emission limits in Tables 1 through 7 to this subpart, and carbon disulfide is the principal organic HAP component (i.e., greater than 50 percent of the HAP in the stream by volume), then you must use Method 18, or Method 15 (40 CFR part 60, appendix A) to measure carbon disulfide at the inlet and outlet of the control device. Use the percent reduction in carbon disulfide as a surrogate for the percent reduction in total organic HAP emissions.

(ii) If you elect to comply with the outlet total organic compound (TOC) concentration emission limits in Tables 1 through 7 to this subpart, and the uncontrolled or inlet gas stream to the control device contains greater than 10 percent (volume concentration) carbon disulfide, you must use Method 18 or Method 15 to separately determine the carbon disulfide concentration. Calculate the total HAP or TOC emissions by totaling the carbon disulfide emissions measured using Method 18 or 15 and the other HAP emissions measured using Method 18 or 25A.

(4) As an alternative to using Method 18, Method 25/25A, or Method 26/26A of 40 CFR part 60, appendix A, to comply with any of the emission limits specified in Tables 1 through 7 to this subpart, you may use Method 320 of 40 CFR part 60, appendix A. When using Method 320, you must follow the analyte spiking procedures of section 13 of Method 320, unless you demonstrate that the complete spiking procedure has been conducted at a similar source.

(5) Section 63.997(c)(1) does not apply. For the purposes of this subpart, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in Sec. 63.2520(d)(1).

(h) Design evaluation. To determine the percent reduction of a small control device that is used to comply with an emission limit specified in Table 1, 2, 3, or 5 to this subpart, you may elect to conduct a design evaluation as specified in Sec. 63.1257(a)(1) instead of a performance test as specified in subpart SS of this part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For transfer racks, the design evaluation must demonstrate that the control device achieves the required control efficiency during the reasonably expected maximum transfer loading rate.

(i) Outlet concentration correction for combustion devices. When Sec. 63.997(e)(2)(iii)(C) requires you to correct the measured concentration at the outlet of a combustion device to 3 percent oxygen if you add supplemental combustion air, the requirements in either paragraph (i)(1) or (2) of this section apply for the purposes of this subpart.

(1) You must correct the concentration in the gas stream at the outlet of the combustion device to 3 percent oxygen if you add supplemental gases, as defined in Sec. 63.2550, to the vent stream, or;

(2) You must correct the measured concentration for supplemental gases using Equation 1 of Sec. 63.2460; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

(j) Continuous emissions monitoring systems. Each continuous emissions monitoring system (CEMS) must be installed, operated, and maintained according to the requirements in Sec. 63.8 and paragraphs (j)(1) through (5) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable Performance Specification of 40 CFR part 60, appendix B, and according to paragraph (j)(2) of this section, except as specified in paragraph (j)(1)(i) of this section. For any CEMS meeting Performance Specification 8, you must also comply with appendix F, procedure 1 of 40 CFR part 60.

(i) If you wish to use a CEMS other than an Fourier Transform Infrared Spectroscopy (FTIR) meeting the requirements of Performance Specification 15 to measure hydrogen halide and halogen HAP before we promulgate a Performance Specification for such CEMS, you must prepare a monitoring plan and submit it for approval in accordance with the procedures specified in Sec. 63.8.

(ii) [Reserved]

(2) You must determine the calibration gases and reporting units for TOC CEMS in accordance with paragraph (j)(2)(i), (ii), or (iii) of this section.

(i) For CEMS meeting Performance Specification 9 or 15 requirements, determine the target analyte(s) for calibration using either process knowledge of the control device inlet stream or the screening procedures of Method 18 on the control device inlet stream.

(ii) For CEMS meeting Performance Specification 8 used to monitor performance of a combustion device, calibrate the instrument on the predominant organic HAP and report the results as carbon (C 1), and use Method 25A or any approved alternative as the reference method for the relative accuracy tests.

(iii) For CEMS meeting Performance Specification 8 used to monitor performance of a noncombustion device, determine the predominant organic HAP using either process knowledge or the screening procedures of Method 18 on the control device inlet stream, calibrate the monitor on the predominant organic HAP, and report the results as C1. Use Method 18, ASTM D6420-99, or any approved alternative as the reference method for the relative accuracy tests, and report the results as C1.

(3) You must conduct a performance evaluation of each CEMS according to the requirements in 40 CFR 63.8 and according to the applicable Performance Specification of 40 CFR part 60, appendix B, except that the schedule in Sec. 63.8(e)(4) does not apply, and the results of the performance evaluation must be included in the notification of compliance status report.

(4) The CEMS data must be reduced to operating day or operating block averages computed using valid data consistent with the data availability requirements specified in Sec. 63.999(c)(6)(i)(B) through (D), except monitoring data also are sufficient to constitute a valid hour of data if measured values are available for at least two of the 15-minute periods during an hour when calibration, quality assurance, or maintenance activities are being performed. An operating block is a period of time from the beginning to end of batch operations within a process. Operating block averages may be used only for batch process vent data.

(5) If you add supplemental gases, you must correct the measured concentrations in accordance with paragraph (i) of this section and Sec. 63.2460(c)(6).

(k) Continuous parameter monitoring. The provisions in paragraphs (k)(1) through (6) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in subpart SS of this part 63.

(1) You must record the results of each calibration check and all maintenance performed on the CPMS as specified in Sec. 63.998(c)(1)(ii)(A).

(2) When subpart SS of this part 63 uses the term ``a range'' or ``operating range'' of a monitored parameter, it means an ``operating limit'' for a monitored parameter for the purposes of this subpart.

(3) As an alternative to continuously measuring and recording pH as specified in Sec. Sec. 63.994(c)(1)(i) and 63.998(a)(2)(ii)(D), you may elect to continuously monitor and record the caustic strength of the effluent. For halogen scrubbers used to control only batch process vents you may elect to monitor and record either the pH or the caustic strength of the scrubber effluent at least once per day.

(4) As an alternative to the inlet and outlet temperature monitoring requirements for catalytic incinerators as specified in Sec. 63.988(c)(2) and the related recordkeeping requirements specified in Sec. 63.998(a)(2)(ii)(B)(2) and (c)(2)(ii), you may elect to comply with the requirements specified in paragraphs (k)(4)(i) through (iv) of this section.

(i) Monitor and record the inlet temperature as specified in subpart SS of this part 63.

(ii) Check the activity level of the catalyst at least every 12 months and take any necessary corrective action, such as replacing the catalyst to ensure that the catalyst is performing as designed.

(iii) Maintain records of the annual checks of catalyst activity levels and the subsequent corrective actions.

(iv) Recording the downstream temperature and temperature difference across the catalyst bed as specified in Sec. 63.998(a)(2)(ii)(B)(2) and (b)(2)(ii) is not required.

(5) For absorbers that control organic compounds and use water as the scrubbing fluid, you must conduct monitoring and recordkeeping as specified in paragraphs (k)(5)(i) through (iii) of this section instead of the monitoring and recordkeeping requirements specified in Sec. Sec. 63.990(c)(1), 63.993(c)(1), and 63.998(a)(2)(ii)(C).

(i) You must use a flow meter capable of providing a continuous record of the absorber influent liquid flow.

(ii) You must determine gas stream flow using one of the procedures specified in Sec. 63.994(c)(1)(ii)(A) through (D).

(iii) You must record the absorber liquid-to-gas ratio averaged over the time period of any performance test.

(6) For a control device with total inlet HAP emissions less than 1 tpy, you must establish an operating limit(s) for a parameter(s) that you will measure and record at least once per averaging period (i.e., daily or block) to verify that the control device is operating properly. You may elect to measure the same parameter(s) that is
required for control devices that control inlet HAP emissions equal to or greater than 1 tpy. If the parameter will not be measured continuously, you must request approval of your proposed procedure in the precompliance report. You must identify the operating limit(s) and the measurement frequency, and

you must provide rationale to support how these measurements demonstrate the control device is operating properly.

(l) Startup, shutdown, and malfunction. Sections 63.152(f)(7)(ii) through (iv) and 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of SSM from daily averages, do not apply for the purposes of this subpart.

(m) Reporting.

(1) When Sec. Sec. 63.2455 through 63.2490 reference other subparts in this part 63 that use the term ``periodic report," it means ``compliance report" for the purposes of this subpart. The compliance report must include the information specified in Sec. 63.2520(e), as well as the information specified in referenced subparts.

(2) When there are conflicts between this subpart and referenced subparts for the due dates of reports required by this subpart, reports must be submitted according to the due dates presented in this subpart.

(3) Excused excursions, as defined in subparts G and SS of this part 63, are not allowed.

(n) [Reserved]

(o) You may not use a flare to control halogenated vent streams or hydrogen halide and halogen HAP emissions.

(p) Opening a safety device, as defined in Sec. 63.2550, is allowed at any time conditions require it to avoid unsafe conditions.

(q) If an emission stream contains energetics or organic peroxides that, for safety reasons, cannot meet an applicable emission limit specified in Tables 1 through 7 to this subpart, then you must submit documentation in your precompliance report explaining why an undue safety hazard would be created if the air emission controls were installed, and you must describe the procedures that you will implement to minimize HAP emissions from these vent streams.

(r) Surge control vessels and bottoms receivers. For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, you must meet emission limits and work practice standards specified in Table 4 to this subpart.

(s) For the purposes of determining Group status for continuous process vents, batch process vents, and storage tanks in Sec. Sec. 63.2455, 63.2460, and 63.2470, hydrazine is to be considered an organic HAP.

Sec. 63.2455 What requirements must I meet for continuous process vents?

(a) You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable requirement specified in paragraphs (b) through (c) of this section.

(b) For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in Sec. 63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.

(1) You are not required to determine the Group status or the TRE index value for any continuous process vent that is combined with Group 1 batch process vents before a control device or recovery device because the requirements of Sec. 63.2450(c)(2)(i) apply to the combined stream.

(2) When a TRE index value of 4.0 is referred to in Sec. 63.115(d), TRE index values of 5.0 for existing affected sources and 8.0 for new and reconstructed affected sources apply for the purposes of this subpart.

(3) When Sec. 63.115(d) refers to ``emission reductions specified in Sec. 63.113(a)," the reductions specified in Table 1 to this subpart apply for the purposes of this subpart.

(c) If you use a recovery device to maintain the TRE above a specified threshold, you must meet the requirements of Sec. 63.982(e) and the requirements referenced therein, except as specified in Sec. 63.2450 and paragraph (c)(1) of this section.

(1) When Sec. 63.993 uses the phrase ``the TRE index value is between the level specified in a referencing subpart and 4.0," the phrase ``the TRE index value is 1.9 but <=5.0" applies for an existing affected source, and the phrase ``the TRE index value is 5.0 but <=8.0" applies for a new and reconstructed affected source, for the purposes of this subpart.

(2) [Reserved]

Sec. 63.2460 What requirements must I meet for batch process vents?

(a) You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in paragraphs (b) and (c) of this section.

(b) Group status. If a process has batch process vents, as defined in Sec. 63.2550, you must determine the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in Sec. 63.1257(d)(2)(i) and (ii), except as specified in paragraphs (b)(1) through (7) of this section.

(1) To calculate emissions caused by the heating of a vessel without a process condenser to a temperature lower than the boiling point, you must use the procedures in Sec. 63.1257(d)(2)(i)(C)(3).

(2) To calculate emissions from depressurization of a vessel without a process condenser, you must use the procedures in Sec. 63.1257(d)(2)(i)(D)(10).

(3) To calculate emissions from vacuum systems for the purposes of this subpart, the receiving vessel is part of the vacuum system, and terms used in Equation 33 to 40 CFR part 63, subpart GGG, are defined as follows:

Psystem = absolute pressure of the receiving vessel;
Pi = partial pressure of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;
Pj = partial pressure of condensables (including HAP) determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;
MWHAP = molecular weight of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver.

(4) To calculate uncontrolled emissions when a vessel is equipped with a process condenser, you must use the procedures in Sec.
63.1257(d)(3)(i)(B), except as specified in paragraphs (b)(4)(i) through (vii) of this section.

(i) You must determine the flowrate of gas (or volume of gas), partial pressures of condensables, temperature (T), and HAP molecular weight (MWHAP) at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver.

(ii) You must assume that all of the componentscontained in the condenser exit vent stream are in equilibrium with the same components in the exit condensate stream (except for noncondensables).

(iii) You must perform a material balance for each component.

(iv) For the emissions from gas evolution, the term for time, t, must be used in Equation 12 to 40 CFR part 63, subpart GGG.

(v) Emissions from empty vessel purging shall be calculated using Equation 36 to 40 CFR part 63, subpart GGG and the exit temperature and exit pressure conditions of the condenser or the conditions of the dedicated receiver.

(vi) You must conduct an engineering assessment as specified in Sec. 63.1257(d)(2)(ii) for each emission episode that is not due to vapor displacement, purging, heating, depressurization, vacuum operations, gas evolution, air drying, or empty vessel purging. The requirements of paragraphs (b)(3) through (4) of this section shall apply.

(vii) You may elect to conduct an engineering assessment if you can demonstrate to the Administrator that the methods in Sec. 63.1257(d)(3)(i)(B) are not appropriate.

(5) You may elect to designate the batch process vents within a process as Group 1 and not calculate uncontrolled emissions under either of the situations in paragraph (b)(5)(i), (ii), or (iii) of this section.

(i) If you comply with the alternative standard specified in Sec. 63.2505.

(ii) If all Group 1 batch process vents within a process are controlled; you conduct the performance test under hypothetical worst case conditions, as defined in Sec. 63.1257(b)(8)(i)(B); and the emission profile is based on capture and control system limitations as specified in Sec. 63.1257(b)(8)(ii)(C).

(iii) If you comply with an emission limit using a flare that meets the requirements specified in Sec. 63.987.

(6) You may change from Group 2 to Group 1 in accordance with either paragraph (b)(6)(i) or (ii) of this section. You must comply with the requirements of this section and submit the test report in the next Compliance report.

(i) You may switch at any time after operating as Group 2 for at least 1 year so that you can show compliance with the 10,000 pounds per year (lb/yr) threshold for Group 2 batch process vents for at least 365 days before the switch. You may elect to start keeping records of emissions from Group 2 batch process vents before the compliance date. Report a switch based on this provision in your next compliance report in accordance with Sec. 63.2520(e)(10)(i).

(ii) If the conditions in paragraph (b)(6)(i) of this section are not applicable, you must provide a 60-day advance notice in accordance with Sec. 63.2520(e)(10)(ii) before switching.

(7) As an alternative to determining the uncontrolled organic HAP emissions as specified in Sec. 63.1257(d)(2)(i) and (ii), you may elect to demonstrate that non-reactive organic HAP are the only HAP used in the process and non-reactive HAP usage in the process is less than 10,000 lb/yr. You must provide data and supporting rationale in your notification of compliance status report explaining why the non-reactive organic HAP usage will be less than 10,000 lb/yr. You must keep records of the non-reactive organic HAP usage as specified in Sec. 63.2525(e)(2) and include information in compliance reports as specified in Sec. 63.2520(e)(5)(iv).

(c) Exceptions to the requirements in subparts SS and WW of this part 63 are specified in paragraphs (c)(1) through (9) of this section.

(1) Process condensers. Process condensers, as defined in Sec. 63.2550(i), are not considered to be control devices for batch process vents. You must determine whether a condenser is a control device for a batch process vent or a process condenser from which the uncontrolled HAP emissions are evaluated as part of the initial compliance demonstration for each MCPU and report the results with supporting rationale in your notification of compliance status report.

(2) Initial compliance.

(i) To demonstrate initial compliance with a percent reduction emission limit in Table 2 to this subpart FFFF, you must compare the sums of the controlled and uncontrolled emissions for the applicable Group 1 batch process vents within the process, and show that the specified reduction is met. This requirement does not apply if you comply with the emission limits of Table 2 to this subpart FFFF by using a flare that meets the requirements of Sec. 63.987.

(ii) When you conduct a performance test or design evaluation for a non-flare control device used to control emissions from batch process vents, you must establish emission profiles and conduct the test under worst-case conditions according to Sec. 63.1257(b)(8) instead of under normal operating conditions as specified in Sec. 63.7(e)(1). The requirements in Sec. 63.997(e)(1)(i) and (iii) also do not apply for performance tests conducted to determine compliance with the emission limits for batch process vents. For purposes of this subpart FFFF, references in Sec. 63.997(b)(1) to ``methods specified in Sec. 63.997(e)" include the methods specified in Sec. 63.1257(b)(8).

(iii) As an alternative to conducting a performance test or design evaluation to demonstrate initial compliance with a percent reduction requirement for a condenser, you may determine controlled emissions using the procedures specified in Sec. 63.1257(d)(3)(i)(B) and paragraphs (b)(3) through (4) of this section.

(iv) When Sec. 63.1257(d)(3)(i)(B)(7) specifies that condenser-controlled emissions from an air dryer must be calculated using Equation 11 of 40 CFR part 63, subpart GGG, with ``V equal to the air flow rate," it means ``V equal to the dryer outlet gas flow rate," for the purposes of this subpart. Alternatively, you may use Equation 12 of 40 CFR part 63, subpart GGG, with V equal to the dryer inlet air flow rate. Account for time as appropriate in either equation.

(v) If a process condenser is used for any boiling operations, you must demonstrate that it is properly operated according to the procedures specified in Sec. 63.1257(d)(2)(i)(C)(4)(ii) and (d)(3)(iii)(B), and the demonstration must occur only during the boiling operation.

(vi) You must conduct a subsequent performance test or compliance demonstration equivalent to an initial compliance demonstration within 180 days of a change in the worst-case conditions.

(3) Establishing operating limits. You must establish operating limits under the conditions required for your initial compliance demonstration, except you may elect to establish operating limit(s) for conditions other than those under which a performance test was conducted as specified in paragraph (c)(3)(i) of this section and, if applicable, paragraph (c)(3)(ii) of this section.

(i) The operating limits may be based on the results of the performance test and supplementary information such as engineering assessments and manufacturer's recommendations. These limits may be established for conditions as unique as individual emission episodes for a batch process. You must provide rationale in the precompliance report for the specific level for each operating limit, including any data and calculations used to develop the limit and a description of why the limit indicates proper operation of the control device. The procedures provided in this paragraph (c)(3)(i) have not been approved by the Administrator and determination of the operating limit using these procedures is subject to review and approval by the Administrator.

(ii) If you elect to establish separate monitoring levels for different emission episodes within a batch process, you must maintain records in your daily schedule or log of processes indicating each point at which you change from one operating limit to another, even if the duration of the monitoring for an operating limit is less than 15 minutes. You must maintain a daily schedule or log of processes according to Sec. 63.2525(c).

(4) Averaging periods. As an alternative to the requirement for daily averages in Sec. 63.998(b)(3), you may determine averages for operating blocks. An operating block is a period of time that is equal to the time from the beginning to end of batch process operations within a process.

(5) [Reserved]

(6) Outlet concentration correction for supplemental gases. If you use a control device other than a combustion device to comply with a TOC, organic HAP, or hydrogen halide and halogen HAP outlet concentration emission limit for batch process vents, you must correct the actual concentration for supplemental gases using Equation 1 of this section; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

$$C_a = C_m\left(\frac{Q_s + Q_a}{Q_a}\right) \qquad \text{(Eq. 1)}$$

Where:
C_a = corrected outlet TOC, organic HAP, or hydrogen halide and halogen HAP concentration, dry basis, ppmv;
C_m = actual TOC, organic HAP, or hydrogen halide and halogen HAP concentration measured at control device outlet, dry basis, ppmv;
Q_a = total volumetric flowrate of all gas streams vented to the control device, except supplemental gases;
Q_s = total volumetric flowrate of supplemental gases.

(7) If flow to a control device could be intermittent, you must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow. Periods of no flow may not be used in daily or block averages, and it may not be used in fulfilling a minimum data availability requirement.

(8) Terminology. When the term ``storage vessel'' is used in subpart WW of this part 63, the term ``process tank,'' as defined in Sec. 63.2550(i), applies for the purposes of this section.

(9) Requirements for a biofilter. If you use a biofilter to meet either the 95 percent reduction requirement or outlet concentration requirement specified in Table 2 to this subpart, you must meet the requirements specified in paragraphs (c)(9)(i) through (iv) of this section.

(i) Operational requirements. The biofilter must be operated at all times when emissions are vented to it.

(ii) Performance tests. To demonstrate initial compliance, you must conduct a performance test according to the procedures in Sec. 63.997 and paragraphs (c)(9)(ii)(A) through (D) of this section. The design evaluation option for small control devices is not applicable if you use a biofilter.

(A) Keep up-to-date, readily accessible continuous records of either the biofilter bed temperature averaged over the full period of the performance test or the outlet total organic HAP or TOC concentration averaged over the full period of the performance test. Include these data in your notification of compliance status report as required by Sec. 63.999(b)(3)(ii).

(B) Record either the percent reduction of total organic HAP achieved by the biofilter determined as specified in Sec. 63.997(e)(2)(iv) or the concentration of TOC or total organic HAP determined as specified in Sec. 63.997(e)(2)(iii) at the outlet of the biofilter, as applicable.

(C) If you monitor the biofilter bed temperature, you may elect to use multiple thermocouples in representative locations throughout the biofilter bed and calculate the average biofilter bed temperature across these thermocouples prior to reducing the temperature data to 15 minute (or shorter) averages for purposes of establishing operating limits for the biofilter. If you use multiple thermocouples, include your rationale for their site selection in your notification of compliance status report.

(D) Submit a performance test report as specified in Sec. 63.999(a)(2)(i) and (ii). Include the records from paragraph (c)(9)(ii)(B) of this section in your performance test report.

(iii) Monitoring requirements. Use either a biofilter bed temperature monitoring device (or multiple devices) capable of providing a continuous record or an organic monitoring device capable of providing a continuous record. Keep records of temperature or other parameter monitoring results as specified in Sec. 63.998(b) and (c), as applicable. General requirements for monitoring are contained in Sec. 63.996. If you monitor temperature, the operating temperature range must be based on only the temperatures measured during the performance test; these data may not be supplemented by engineering assessments or manufacturer's recommendations as otherwise allowed in Sec. 63.999(b)(3)(ii)(A). If you establish the operating range (minimum and maximum temperatures) using data from previous performance tests in accordance with Sec. 63.996(c)(6), replacement of the biofilter media with the same type of media is not considered a process change under Sec. 63.997(b)(1). You may expand your biofilter

bed temperature operating range by conducting a repeat performance test that demonstrates compliance with the 95 percent reduction requirement or outlet concentration limit, as applicable.

(iv) Repeat performance tests. You must conduct a repeat performance test using the applicable methods specified in Sec. 63.997 within 2 years following the previous performance test and within 150 days after each replacement of any portion of the biofilter bed media with a different type of media or each replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media.

Sec. 63.2465 What requirements must I meet for process vents that emit hydrogen halide and halogen HAP or HAP metals?

(a) You must meet each emission limit in Table 3 to this subpart that applies to you, and you must meet each applicable requirement in paragraphs (b) through (d) of this section.

(b) If any process vents within a process emit hydrogen halide and halogen HAP, you must determine and sum the uncontrolled hydrogen halide and halogen HAP emissions from each of the process vents within the process using the procedures specified in Sec. 63.1257(d)(2)(i) and/or (ii), as appropriate. When Sec. 63.1257(d)(2)(ii)(E) requires documentation to be submitted in the precompliance report, it means the notification of compliance status report for the purposes of this paragraph.

(c) If collective uncontrolled hydrogen halide and halogen HAP emissions from the process vents within a process are greater than or equal to 1,000 pounds per year (lb/yr), you must comply with Sec. 63.994 and the requirements referenced therein, except as specified in paragraphs (c)(1) through (3) of this section.

(1) When Sec. 63.994(b)(1) requires a performance test, you may elect to conduct a design evaluation in accordance with Sec. 63.1257(a)(1).

(2) When Sec. 63.994(b)(1) refers to ``a combustion device followed by a halogen scrubber or other halogen reduction device," it means any combination of control devices used to meet the emission limits specified in Table 3 to this subpart.

(3) Section 63.994(b)(2) does not apply for the purposes of this section.

(d) To demonstrate compliance with the emission limit in Table 3 to this subpart for HAP metals at a new source, you must comply with paragraphs (d)(1) through (3) of this section.

(1) Determine the mass emission rate of HAP metals based on process knowledge, engineering assessment, or test data.

(2) Conduct an initial performance test of each control device that is used to comply with the emission limit for HAP metals specified in Table 3 to this subpart. Conduct the performance test according to the procedures in Sec. 63.997. Use Method 29 of appendix A of 40 CFR part 60 to determine the HAP metals at the inlet and outlet of each control device, or use Method 5 of appendix A of 40 CFR part 60 to determine the total particulate matter (PM) at the inlet and outlet of each control device. You have demonstrated initial compliance if the overall reduction of either HAP metals or total PM from the process is greater than or equal to 97 percent by weight.

(3) Comply with the monitoring requirements specified in Sec. 63.1366(b)(1)(xi) for each fabric filter used to control HAP metals.

Sec. 63.2470 What requirements must I meet for storage tanks?

(a) You must meet each emission limit in Table 4 to this subpart that applies to your storage tanks, and you must meet each applicable requirement specified in paragraphs (b) through (e) of this section.

(b) [Reserved]

(c) Exceptions to subparts SS and WW of this part 63.

(1) If you conduct a performance test or design evaluation for a control device used to control emissions only from storage tanks, you must establish operating limits, conduct monitoring, and keep records using the same procedures as required in subpart SS of this part 63 for control devices used to reduce emissions from process vents instead of the procedures specified in Sec. Sec. 63.985(c), 63.998(d)(2)(i), and
63.999(b)(2).

(2) When the term ``storage vessel'' is used in subparts SS and WW of this part 63, the term ``storage tank,'' as defined in Sec. 63.2550 applies for the purposes of this subpart.

(d) Planned routine maintenance. The emission limits in Table 4 to this subpart for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in Table 4 to this subpart, must not exceed 240 hours per year (hr/yr). You may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed, it must indicate that no material will be added to the storage tank between the time the 240-hr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240-hr limit will be exceeded.

(e) Vapor balancing alternative. As an alternative to the emission limits specified in Table 4 to this subpart, you may elect to implement vapor balancing in accordance with Sec. 63.1253(f), except as specified in paragraphs (e)(1) through (3) of this section.

(1) When Sec. 63.1253(f)(6)(i) refers to a 90 percent reduction, 95 percent applies for the purposes of this subpart.

(2) To comply with Sec. 63.1253(f)(6)(i), the owner or operator of an offsite cleaning or reloading facility must comply with Sec. Sec.
63.2445 through 63.2550 instead of complying with Sec. 63.1253(f)(7)(ii), except as specified in paragraph (e)(2)(i) or (ii) of this section.

(i) The reporting requirements in Sec. 63.2520 do not apply to the owner or operator of the offsite cleaning or reloading facility.

(ii) As an alternative to complying with the monitoring, recordkeeping, and reporting provisions in Sec. Sec. 63.2445 through 63.2550, the owner or operator of an offsite cleaning or reloading facility may comply as specified in Sec. 63.2535(a)(2) with any other subpart of this part 63 which has monitoring, recordkeeping, and reporting provisions as specified in Sec. 63.2535(a)(2).

(3) You may elect to set a pressure relief device to a value less than the 2.5 pounds per square inch gage pressure (psig) required in Sec. 63.1253(f)(5) if you provide rationale in your notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times.

(4) You may comply with the vapor balancing alternative in Sec. 63.1253(f) when your storage tank is filled from a barge. All requirements for tank trucks and railcars specified in Sec. 63.1253(f) also apply to barges, except as specified in Sec. 63.2470(e)(4)(i).

(i) When Sec. 63.1253(f)(2) refers to pressure testing certifications, the requirements in 40 CFR 61.304(f) apply for barges.

(ii) [Reserved]

Sec. 63.2475 What requirements must I meet for transfer racks?

(a) You must comply with each emission limit and work practice standard in Table 5 to this subpart that applies to your transfer racks, and you must meet each applicable requirement in paragraphs (b) and (c) of this section.

(b) When the term ``high throughput transfer rack'' is used in subpart SS of this part 63, the term ``Group 1 transfer rack,'' as defined in Sec. 63.2550, applies for the purposes of this subpart.

Sec. 63.2480 What requirements must I meet for equipment leaks?

(a) You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.

(b) If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.

(1) The requirements for pressure testing in Sec. 63.179(b) or Sec. 63.1036(b) may be applied to all processes, not just batch processes.

(2) For the purposes of this subpart, pressure testing for leaks in accordance with Sec. 63.179(b) or Sec. 63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under Sec. 63.1022(b)(1) or Sec. 63.181(b)(1)(i).

(4) For connectors in gas/vapor and light liquid service at an existing source, you may elect to comply with the requirements in Sec. 63.169 or Sec. 63.1029 for connectors in heavy liquid service, including all associated recordkeeping and reporting requirements, rather than the requirements of Sec. 63.174 or Sec. 63.1027.

(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 parts per million (ppm) or greater as an alternative to the values specified in Sec. 63.1026(b)(2)(i) through (iii) or Sec.
63.163(b)(2).

(c) If you comply with 40 CFR part 65, subpart F, you may elect to comply with the provisions in paragraphs (c)(1) through (9) of this section as an alternative to the referenced provisions in 40 CFR part 65, subpart F.

(1) The requirements for pressure testing in Sec. 65.117(b) may be applied to all processes, not just batch processes.

(2) For the purposes of this subpart, pressure testing for leaks in accordance with Sec. 65.117(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under Sec. 65.103(b)(1).

(4) You may elect to comply with the monitoring and repair requirements specified in Sec. 65.108(e)(3) as an alternative to the requirements specified in Sec. 65.108(a) through (d) for any connectors at your affected source.

(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 ppm or greater as an alternative to the values specified in Sec. 65.107(b)(2)(i) through (iii).

(6) When 40 CFR part 65, subpart F refers to the implementation date specified in Sec. 65.1(f), it means the compliance date specified in Sec. 63.2445.

(7) When Sec. Sec. 65.105(f) and 65.117(d)(3) refer to Sec. 65.4, it means Sec. 63.2525.

(8) When Sec. 65.120(a) refers to Sec. 65.5(d), it means Sec. 63.2515.

(9) When Sec. 65.120(b) refers to Sec. 65.5(e), it means Sec. 63.2520.

(d) The provisions of this section do not apply to bench-scale processes, regardless of whether the processes are located at the same plant site as a process subject to the provisions of this subpart.

Sec. 63.2485 What requirements must I meet for wastewater streams and liquid streams in open systems within an MCPU?

(a) You must meet each requirement in Table 7 to this subpart that applies to your wastewater streams and liquid streams in open systems within an MCPU, except as specified in paragraphs (b) through (o) of this section.

(b) Wastewater HAP. Where Sec. 63.105 and Sec. Sec. 63.132 through 63.148 refer to compounds in Table 9 of subpart G of this part 63, the compounds in Tables 8 and 9 to this subpart apply for the purposes of this subpart.

(c) Group 1 wastewater. Section 63.132(c)(1) (i) and (ii) do not apply. For the purposes of this subpart, a process wastewater stream is Group 1 for compounds in Tables 8 and 9 to this subpart if any of the conditions specified in paragraphs (c) (1) through (3) of this section are met.

(1) The total annual average concentration of compounds in Table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in Table 8 to this subpart is greater than or equal to 200 lb/yr.

(2) The total annual average concentration of compounds in Table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.

(3) The combined total annual average concentration of compounds in Tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in Tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

(d) Wastewater tank requirements.

(1) When Sec. Sec. 63.133 and 63.147 reference floating roof requirements in Sec. Sec. 63.119 and 63.120, the corresponding requirements in subpart WW of this part 63 may be applied for the purposes of this subpart.

(2) When Sec. 63.133(a) refers to Table 10 of subpart G of this part 63, the maximum true vapor pressure in the table shall be limited to the HAP listed in Tables 8 and 9 of this subpart FFFF.

(3) For the purposes of this subpart, the requirements of Sec. 63.133(a)(2) are satisfied by operating and maintaining a fixed roof if you demonstrate that the total soluble and partially soluble HAP emissions from the wastewater tank are no more than 5 percent higher than the emissions would be if the contents of the wastewater tank were not heated, treated by an exothermic reaction, or sparged.

(4) The emission limits specified in Sec. Sec. 63.133(b)(2) and 63.139 for control devices used to control emissions from wastewater tanks do not apply during periods of planned routine maintenance of the control device(s) of no more than 240 hr/yr. You may request an extension to a total of 360 hr/yr in accordance with the procedures specified in Sec. 63.2470(d).

(e) Individual drain systems. The provisions of Sec. 63.136(e)(3) apply except as specified in paragraph (e)(1) of this section.

(1) A sewer line connected to drains that are in compliance with Sec. 63.136(e)(1) may be vented to the atmosphere, provided that the sewer line entrance to the first downstream junction box is water sealed and the sewer line vent pipe is designed as specified in Sec. 63.136(e)(2)(ii)(A).

(2) [Reserved]

(f) Closed-vent system requirements. When Sec. 63.148(k) refers to closed vent systems that are subject to the requirements of Sec. 63.172, the requirements of either Sec. 63.172 or Sec. 63.1034 apply for the purposes of this subpart.

(g) Halogenated vent stream requirements. For each halogenated vent stream from a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream that is vented through a closed-vent system

to a combustion device to reduce organic HAP emissions, you must meet the same emission limits as specified for batch process vents in item 2 of Table 2 to this subpart.

(h) Alternative test methods.

(1) As an alternative to the test methods specified in Sec. 63.144(b)(5)(i), you may use Method 8260 or 8270 as specified in Sec. 63.1257(b)(10)(iii).

(2) As an alternative to using the methods specified in Sec. 63.144(b)(5)(i), you may conduct wastewater analyses using Method 1666 or 1671 of 40 CFR part 136 and comply with the sampling protocol requirements specified in Sec. 63.144(b)(5)(ii). The validation requirements specified in Sec. 63.144(b)(5)(iii) do not apply if you use Method 1666 or 1671 of 40 CFR part 136.

(3) As an alternative to using Method 18 of 40 CFR part 60, as specified in Sec. Sec. 63.139(c)(1)(ii) and 63.145(i)(2), you may elect to use Method 25A of 40 CFR part 60 as specified in Sec. 63.997.

(i) Offsite management and treatment option. (1) If you ship wastewater to an offsite treatment facility that meets the requirements of Sec. 63.138(h), you may elect to document in your notification of compliance status report that the wastewater will be treated as hazardous waste at a facility that meets the requirements of Sec. 63.138(h) as an alternative to having the offsite facility submit the certification specified in Sec. 63.132(g)(2).

(2) As an alternative to the management and treatment options specified in Sec. 63.132(g)(2), any affected wastewater stream (or residual removed from an affected wastewater stream) with a total annual average concentration of compounds in Table 8 to this subpart less than 50 ppmw may be transferred offsite in accordance with paragraphs (i)(2) (i) and (ii) of this section.

(i) The transferee (or you) must demonstrate that less than 5 percent of the HAP in Table 9 to this subpart is emitted from the waste management units up to the activated sludge unit.

(ii) The transferee must treat the wastewater stream or residual in a biological treatment unit in accordance with Sec. Sec. 63.138 and 63.145 and the requirements referenced therein.

(j) You must determine the annual average concentration and annual average flowrate for wastewater streams for each MCPU. The procedures for flexible operation units specified in Sec. 63.144 (b) and (c) do not apply for the purposes of this subpart.

(k) The requirement to correct outlet concentrations from combustion devices to 3 percent oxygen in Sec. Sec. 63.139(c)(1)(ii) and 63.146(i)(6) applies only if supplemental gases are combined with a vent stream from a Group 1 wastewater stream. If emissions are controlled with a vapor recovery system as specified in Sec. 63.139(c)(2), you must correct for supplemental gases as specified in Sec. 63.2460(c)(6).

(l) Requirements for liquid streams in open systems.

(1) References in Sec. 63.149 to Sec. 63.100(b) mean Sec. 63.2435(b) for the purposes of this subpart.

(2) When Sec. 63.149(e) refers to 40 CFR 63.100(l) (1) or (2), Sec. 63.2445(a) applies for the purposes of this subpart.

(3) When Sec. 63.149 uses the term ``chemical manufacturing process unit," the term ``MCPU" applies for the purposes of this subpart.

(4) When Sec. 63.149(e)(1) refers to characteristics of water that contain compounds in Table 9 to 40 CFR part 63, subpart G, the characteristics specified in paragraphs (c) (1) through (3) of this section apply for the purposes of this subpart.

(5) When Sec. 63.149(e)(2) refers to characteristics of water that contain compounds in Table 9 to 40 CFR part 63, subpart G, the characteristics specified in paragraph (c)(2) of this section apply for the purposes of this subpart.

(m) When Sec. 63.132(f) refers to ``a concentration of greater than 10,000 ppmw of Table 9 compounds," the phrase ``a concentration of greater than 30,000 ppmw of total partially soluble HAP (PSHAP) and soluble HAP (SHAP) or greater than 10,000 ppmw of PSHAP" shall apply for the purposes of this subpart.

(n) Alternative requirements for wastewater that is Group 1 for soluble HAP only. The option specified in this paragraph (n) applies to wastewater that is Group 1 for soluble HAP in accordance with paragraph (c)(3) of this section and is discharged to biological treatment. Except as provided in paragraph (n)(4) of this section, this option does not apply to wastewater that is Group 1 for partially soluble HAP in accordance with paragraph (c)(1), (c)(2), or (c)(4) of this section. For wastewater that is Group 1 for SHAP, you need not comply with Sec. Sec. 63.133 through 63.137 for any equalization unit, neutralization unit, and/or clarifier prior to the activated sludge unit, and you need not comply with the venting requirements in Sec. 63.136(e)(2)(ii)(A) for lift stations with a volume larger than 10,000 gal, provided you comply with the requirements specified in paragraphs (n)(1) through (3) of this section and all otherwise applicable requirements specified in Table 7 to this subpart. For this option, the treatment requirements in Sec. 63.138 and the performance testing requirements in Sec. 63.145 do not apply to the biological treatment unit, except as specified in paragraphs (n)(2)(i) through (iv) of this section.

(1) Wastewater must be hard-piped between the equalization unit, clarifier, and activated sludge unit. This requirement does not apply to the transfer between any of these types of units that are part of the same structure and one unit overflows into the next.

(2) Calculate the destruction efficiency of the biological treatment unit using Equation 1 of this section in accordance with the procedures described in paragraphs (n)(2)(i) through (vi) of this section. You have demonstrated initial compliance if E is greater than or equal to 90 percent.

[GRAPHIC] [TIFF OMITTED] TR14JY06.031

Where:

E = destruction efficiency of total PSHAP and SHAP for the biological treatment unit including the equalization unit, neutralization unit, and/or clarifier, percent;
QMWa = mass flow rate of total PSHAP and SHAP compounds entering the equalization unit (or whichever of the three types of units is first), kilograms per hour (kg/hr);
QMGe = mass flow rate of total PSHAP and SHAP compounds emitted from the equalization unit, kg/hr;
QMGn = mass flow rate of total PSHAP and SHAP compounds emitted from the neutralization unit, kg/hr;
QMGc = mass flow rate of total PSHAP and SHAP compounds emitted from the clarifier, kg/hr
Fbio = site-specific fraction of PSHAP and SHAP compounds biodegraded in the biological treatment unit.

(i) Include all PSHAP and SHAP compounds in both Group 1 and Group 2 wastewater streams from all MCPU, except you may exclude any compounds that meet the criteria specified in Sec. 63.145(a)(6)(ii) or (iii).

(ii) Conduct the demonstration under representative process unit and treatment unit operating conditions in accordance with Sec. 63.145(a)(3) and (4).

(iii) Determine PSHAP and SHAP concentrations and the total wastewater flow rate at the inlet to the equalization unit in accordance with Sec. 63.145(f)(1) and (2). References in Sec. 63.145(f)(1) and (2) to required mass removal and actual mass removal do not apply for the purposes of this section.

(iv) Determine Fbio for the activated sludge unit as specified in Sec. 63.145(h), except as specified in paragraph (n)(2)(iv)(A) or paragraph (n)(2)(iv)(B) of this section.

(A) If the biological treatment process meets both of the requirements specified in Sec. 63.145(h)(1)(i) and (ii), you may elect to replace the Fbio term in Equation 1 of this section with the numeral ``1."

(B) You may elect to assume fbio is zero for any compounds on List 2 of Table 36 in subpart G.

(v) Determine QMGe, QMGn, and QMGc using EPA's WATER9 model or the most recent update to this model, and conduct testing or use other procedures to validate the modeling results.

(vi) Submit the data and results of your demonstration, including both a description of and the results of your WATER9 modeling validation procedures, in your notification of compliance status report as specified in Sec. 63.2520(d)(2)(ii).

(3) As an alternative to the venting requirements in Sec. 63.136(e)(2)(ii)(A), a lift station with a volume larger than 10,000 gal may have openings necessary for proper venting of the lift station. The size and other design characteristics of these openings may be established based on manufacturer recommendations or engineering judgment for venting under normal operating conditions. You must describe the design of such openings and your supporting calculations and other rationale in your notification of compliance status report.

(4) For any wastewater streams that are Group 1 for both PSHAP and SHAP, you may elect to meet the requirements specified in Table 7 to this subpart for the PSHAP and then comply with paragraphs (n)(1) through (3) of this section for the SHAP in the wastewater system. You may determine the SHAP mass removal rate, in kg/hr, in treatment units that are used to meet the requirements for PSHAP and add this amount to both the numerator and denominator in Equation 1 of this section.

(o) Compliance records. For each CPMS used to monitor a nonflare control device for wastewater emissions, you must keep records as specified in Sec. 63.998(c)(1) in addition to the records required in Sec. 63.147(d).

Sec. 63.2490 What requirements must I meet for heat exchange systems?

(a) You must comply with each requirement in Table 10 to this subpart that applies to your heat exchange systems, except as specified in paragraphs (b) and (c) of this section.

(b) The phrase ``a chemical manufacturing process unit meeting the conditions of Sec. 63.100 (b)(1) through (b)(3) of this section" in Sec. 63.104(a) means ``an MCPU meeting the conditions of Sec. 63.2435" for the purposes of this subpart.

(c) The reference to Sec. 63.100(c) in Sec. 63.104(a) does not apply for the purposes of this subpart.

Sec. 63.2495 How do I comply with the pollution prevention standard?

(a) You may elect to comply with the pollution prevention alternative requirements specified in paragraphs (a) (1) and (2) of this section in lieu of the emission limitations and work practice standards contained in Tables 1 through 7 to this subpart for any MCPU for which initial startup occurred before April 4, 2002.

(1) You must reduce the production-indexed HAP consumption factor (HAP factor) by at least 65 percent from a 3-year average baseline beginning no earlier than the 1994 through 1996 calendar years. For any reduction in the HAP factor that you achieve by reducing HAP that are also volatile organic compounds (VOC), you must demonstrate an equivalent reduction in the production-indexed VOC consumption factor (VOC factor) on a mass basis. For any reduction in the HAP factor that you achieve by reducing a HAP that is not a VOC, you may not increase the VOC factor.

(2) Any MCPU for which you seek to comply by using the pollution prevention alternative must begin with the same starting material(s) and end with the same product(s). You may not comply by eliminating any steps of a process by transferring the step offsite (to another manufacturing location).

You may also not merge a solvent recovery step conducted offsite to onsite and as part of an existing process as a method of reducing consumption.

(3) You may comply with the requirements of paragraph (a)(1) of this section for a series of processes, including situations where multiple processes are merged, if you demonstrate to the satisfaction of the Administrator that the multiple processes were merged after the baseline period into an existing process or processes.

(b) Exclusions.

(1) You must comply with the emission limitations and work practice standards contained in Tables 1 through 7 of this subpart for all HAP that are generated in the MCPU and that are not included in consumption, as defined in Sec. 63.2550. If any vent stream routed to the combustion control is a halogenated vent stream, as defined in Sec. 63.2550, then hydrogen halides that are generated as a result of combustion control must be controlled according to the requirements of Sec. 63.994 and the requirements referenced therein.

(2) You maynot merge nondedicated formulation or nondedicated solvent recovery processes with anyother processes.

(c) Initial compliance procedures. To demonstrate initial compliance with paragraph (a) of this section, you must prepare a demonstration summary in accordance with paragraph (c) (1) of this section and calculate baseline and target annual HAP and VOC factors in accordance with paragraphs (c) (2) and (3) of this section.

(1) Demonstration plan. You must prepare a pollution prevention demonstration plan that contains, at a minimum, the information in paragraphs (c)(1) (i) through (iii) of this section for each MCPU for which you comply with paragraph (a) of this section.

(i) Descriptions of the methodologies and forms used to measure and record consumption of HAP and VOC compounds.

(ii) Descriptions of the methodologies and forms used to measure and record production of the product(s).

(iii) Supporting documentation for the descriptions provided in accordance with paragraphs (c)(1) (i) and (ii) of this section including, but not limited to, samples of operator log sheets and daily, monthly, and/or annual inventories of materials and products. You must describe how this documentation will be used to calculate the annual factors required in paragraph (d) of this section.

(2) Baseline factors. You must calculate baseline HAP and VOC factors by dividing the consumption of total HAP and total VOC by the production rate, per process, for the first 3-year period in which the process was operational, beginning no earlier than the period consisting of the 1994 through 1996 calendar years.

(3) Target annual factors. You must calculate target annual HAP and VOC factors. The target annual HAP factor must be equal to 35 percent of the baseline HAP factor. The target annual VOC factor must be lower than the baseline VOC factor by an amount equivalent to the reduction in any HAP that is also a VOC, on a mass basis. The target annual VOC factor may be the same as the baseline VOC factor if the only HAP you reduce is not a VOC.

(d) Continuous compliance requirements. You must calculate annual rolling average values of the HAP and VOC factors (annual factors) in accordance with the procedures specified in paragraphs (d) (1) through (3) of this section. To show continuous compliance, the annual factors must be equal to or less than the target annual factors calculated according to paragraph (c)(3) of this section.

(1) To calculate the annual factors, you must divide the consumption of both total HAP and total VOC by the production rate, per process, for 12-month periods at the frequency specified in either paragraph (d) (2) or (3) of this section, as applicable.

(2) For continuous processes, you must calculate the annual factors every 30 days for the 12-month period preceding the 30th day (i.e., annual rolling average calculated every 30 days). A process

with both batch and continuous operations is considered a continuous process for the purposes of this section.

(3) For batch processes, you must calculate the annual factors every 10 batches for the 12-month period preceding the 10th batch (i.e., annual rolling average calculated every 10 batches), except as specified in paragraphs (d)(3) (i) and (ii) of this section.

(i) If you produce more than 10 batches during a month, you must calculate the annual factors at least once during that month.

(ii) If you produce less than 10 batches in a 12-month period, you must calculate the annual factors for the number of batches in the 12-month period since the previous calculations.

(e) Records. You must keep records of HAP and VOC consumption, production, and the rolling annual HAP and VOC factors for each MCPU for which you are complying with paragraph (a) of this section.

(f) Reporting.

(1) You must include the pollution prevention demonstration plan in the precompliance report required by Sec. 63.2520(c).

(2) You must identify all days when the annual factors were above the target factors in the compliance reports.

Sec. 63.2500 How do I comply with emissions averaging?

(a) For an existing source, you may elect to comply with the percent reduction emission limitations in Tables 1, 2, 4, 5, and 7 to this subpart by complying with the emissions averaging provisions specified in Sec. 63.150, except as specified in paragraphs (b) through (f) of this section.

(b) The batch process vents in an MCPU collectively are considered one individual emission point for the purposes of emissions averaging, except that only individual batch process vents must be excluded to meet the requirements of Sec. 63.150(d)(5).

(c) References in Sec. 63.150 to Sec. Sec. 63.112 through 63.130 mean the corresponding requirements in Sec. Sec. 63.2450 through 63.2490, including applicable monitoring, recordkeeping, and reporting.

(d) References to ``periodic reports'' in Sec. 63.150 mean ``compliance report'' for the purposes of this subpart.

(e) For batch process vents, estimate uncontrolled emissions for a standard batch using the procedures in Sec. 63.1257(d)(2)(i) and (ii) instead of the procedures in Sec. 63.150(g)(2). Multiply the calculated emissions per batch by the number of batches per month when calculating the monthly emissions for use in calculating debits and credits.

(f) References to ``storage vessels'' in Sec. 63.150 mean ``storage tank'' as defined in Sec. 63.2550 for the purposes of this subpart.

Sec. 63.2505 How do I comply with the alternative standard?

As an alternative to complying with the emission limits and work practice standards for process vents and storage tanks in Tables 1 through 4 to this subpart and the requirements in Sec. Sec. 63.2455 through 63.2470, you may comply with the emission limits in paragraph (a) of this section and demonstrate compliance in accordance with the requirements in paragraph (b) of this section.

(a) Emission limits and work practice standards.

(1) You must route vent streams through a closed-vent system to a control device that reduces HAP emissions as specified in either paragraph (a)(1)(i) or (ii) of this section.

(i) If you use a combustion control device, it must reduce HAP emissions as specified in paragraphs (a)(1)(i)(A), (B), and (C) of this section.

(A) To an outlet TOC concentration of 20 parts per million by volume (ppmv) or less.

(B) To an outlet concentration of hydrogen halide and halogen HAP of 20 ppmv or less.

(C) As an alternative to paragraph (a)(1)(i)(B) of this section, if you control halogenated vent streams emitted from a combustion device followed by a scrubber, reduce the hydrogen halide and halogen HAP generated in the combustion device by greater than or equal to 95 percent by weight in the scrubber.

(ii) If you use a noncombustion control device(s), it must reduce HAP emissions to an outlet total organic HAP concentration of 50 ppmv or less, and an outlet concentration of hydrogen halide and halogen HAP of 50 ppmv or less.

(2) Any Group 1 process vents within a process that are not controlled according to this alternative standard must be controlled according to the emission limits in Tables 1 through 3 to this subpart.

(b) Compliance requirements. To demonstrate compliance with paragraph (a) of this section, you must meet the requirements of Sec. 63.1258(b)(5) beginning no later than the initial compliance date specified in Sec. 63.2445, except as specified in paragraphs (b)(1) through (9) of this section.

(1) You must comply with the requirements in Sec. 63.983 and the requirements referenced therein for closed-vent systems.

(2) When Sec. 63.1258(b)(5)(i) refers to Sec. Sec. 63.1253(d) and 63.1254(c), the requirements in paragraph (a) of this section apply for the purposes of this subpart FFFF.

(3) When Sec. 63.1258(b)(5)(i)(B) refers to ``HCl," it means ``total hydrogen halide and halogen HAP" for the purposes of this subpart FFFF.

(4) When Sec. 63.1258(b)(5)(ii) refers to Sec. 63.1257(a)(3), it means Sec. 63.2450(j)(5) for the purposes of this subpart FFFF.

(5) You must submit the results of any determination of the target analytes of predominant HAP in the notification of compliance status report.

(6) If you elect to comply with the requirement to reduce hydrogen halide and halogen HAP by greater than or equal to 95 percent by weight in paragraph (a)(1)(i)(C) of this section, you must meet the requirements in paragraphs (b)(6)(i) and (ii) of this section.

(i) Demonstrate initial compliance with the 95 percent reduction by conducting a performance test and setting a site-specific operating limit(s) for the scrubber in accordance with Sec. 63.994 and the requirements referenced therein. You must submit the results of the initial compliance demonstration in the notification of compliance status report.

(ii) Install, operate, and maintain CPMS for the scrubber as specified in Sec. Sec. 63.994(c) and 63.2450(k), instead of as specified in Sec. 63.1258(b)(5)(i)(C).

(7) If flow to the scrubber could be intermittent, you must install, calibrate, and operate a flow indicator as specified in Sec. 63.2460(c)(7).

(8) Use the operating day as the averaging period for CEMS data and scrubber parameter monitoring data.

(9) The requirements in paragraph (a) of this section do not apply to emissions from storage tanks during periods of planned routine maintenance of the control device that do not exceed 240 hr/yr. You may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr in accordance with the procedures specified in Sec. 63.2470(d). You must comply with the recordkeeping and reporting specified in Sec. Sec. 63.998(d)(2)(ii) and 63.999(c)(4) for periods of planned routine maintenance.

Sec. 63.2515 What notifications must I submit and when?

(a) You must submit all of the notifications in Sec. Sec. 63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

(b) Initial notification. As specified in Sec. 63.9(b)(2), if you startup your affected source before November 10, 2003, you must submit an initial notification not later than 120 calendar days after November 10, 2003.

(2) As specified in Sec. 63.9(b)(3), if you startup your new affected source on or after November 10, 2003, you must submit an initial notification not later than 120 calendar days after you become subject to this subpart.

(c) Notification of performance test. If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in Sec. 63.7(b)(1). For any performance test required as part of the initial compliance procedures for batch process vents in Table 2 to this subpart, you must also submit the test plan required by Sec. 63.7(c) and the emission profile with the notification of the performance test.

Sec. 63.2520 What reports must I submit and when?

(a) You must submit each report in Table 11 to this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under Sec. 63.10(a), you must submit each report by the date in Table 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in Sec. 63.2445 and ending on June 30 or December 31, whichever date is the first date following the end of the first 6 months after the compliance date that is specified for your affected source in Sec. 63.2445.

(2) The first compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the first reporting period specified in paragraph (b)(1) of this section.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) Precompliance report. You must submit a precompliance report to request approval for any of the items in paragraphs (c)(1) through (7) of this section. We will either approve or disapprove the report within 90 days after we receive it. If we disapprove the report, you must still be in compliance with the emission limitations and work practice standards in this subpart by the compliance date. To change any of the information submitted in the report, you must notify us 60 days before the planned change is to be implemented.

(1) Requests for approval to set operating limits for parameters other than those specified in Sec. Sec. 63.2455 through 63.2485 and referenced therein. Alternatively, you may make these requests according to Sec. 63.8(f).

(2) Descriptions of daily or per batch demonstrations to verify that control devices subject to Sec. 63.2460(c)(5) are operating as designed.

(3) A description of the test conditions, data, calculations, and other information used to establish operating limits according to Sec. 63.2460(c)(3).

(4) Data and rationale used to support an engineering assessment to calculate uncontrolled emissions in accordance with Sec. 63.1257(d)(2)(ii). This requirement does not apply to calculations of hydrogen halide and halogen HAP emissions as specified in Sec. 63.2465(b), to determinations that the total HAP concentration is less than 50 ppmv, or if you use previous test data to establish the uncontrolled emissions.

(5) The pollution prevention demonstration plan required in Sec. 63.2495(c)(1), if you are complying with the pollution prevention alternative.

(6) Documentation of the practices that you will implement to minimize HAP emissions from streams that contain energetics and organic peroxides, and rationale for why meeting the emission limit specified in Tables 1 through 7 to this subpart would create an undue safety hazard.

(7) For fabric filters that are monitored with bag leak detectors, an operation and maintenance plan that describes proper operation and maintenance procedures, and a corrective action plan that describes corrective actions to be taken, and the timing of those actions, when the PM concentration exceeds the set point and activates the alarm.

(d) Notification of compliance status report. You must submit a notification of compliance status report according to the schedule in paragraph (d)(1) of this section, and the notification of compliance status report must contain the information specified in paragraph (d)(2) of this section.

(1) You must submit the notification of compliance status report no later than 150 days after the applicable compliance date specified in Sec. 63.2445.

(2) The notification of compliance status report must include the information in paragraphs (d)(2)(i) through (ix) of this section.

(i) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP usage or HAP emissions from the affected source.

(ii) The results of emissions profiles, performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to Sec. Sec. 63.2455 through 63.2485. For performance tests, results must include descriptions of sampling and analysis procedures and quality assurance procedures.

(iii) Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels you establish.

(iv) All operating scenarios.

(v) Descriptions of worst-case operating and/or testing conditions for control devices.

(vi) Identification of parts of the affected source subject to overlapping requirements described in Sec. 63.2535 and the authority under which you will comply.

(vii) The information specified in Sec. 63.1039(a)(1) through (3) for each process subject to the work practice standards for equipment leaks in Table 6 to this subpart.

(viii) Identify storage tanks for which you are complying with the vapor balancing alternative in Sec. 63.2470(e).

(ix) Records as specified in Sec. 63.2535(l)(1) through (3) of process units used to create a PUG and calculations of the initial primary product of the PUG.

(e) Compliance report. The compliance report must contain the information specified in paragraphs (e)(1) through (10) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) For each SSM during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction.

(5) The compliance report must contain the information on deviations, as defined in Sec. 63.2550, according to paragraphs (e)(5)(i), (ii), (iii), and (iv) of this section.

(i) If there are no deviations from any emission limit, operating limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(ii) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in this subpart, you must include the information in paragraphs (e)(5)(ii)(A) through (C) of this section. This includes periods of SSM.

(A) The total operating time of the affected source during the reporting period.

(B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(C) Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.

(iii) For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with an emission limit in this subpart, you must include the information in paragraphs (e)(5)(iii)(A) through (L) of this section. This includes periods of SSM.

(A) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(B) The date, time, and duration that each CEMS was out-of-control, including the information in Sec. 63.8(c)(8).

(C) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(D) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total operating time of the affected source during that reporting period.

(E) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(F) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the affected source during that reporting period.

(G) An identification of each HAP that is known to be in the emission stream.

(H) A brief description of the process units.

(I) A brief description of the CMS.

(J) The date of the latest CMS certification or audit.

(K) Operating logs of processes with batch vents from batch operations for each day(s) during which the deviation occurred.

(L) The operating day or operating block average values of monitored parameters for each day(s) during which the deviation occurred.

(iv) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive HAP is the only HAP and usage is less than 10,000 lb/yr, the total uncontrolled organic HAP emissions from the batch process vents in an

MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, or total uncontrolled hydrogen halide and halogen HAP emissions from all batch process vents and continuous process vents in a process are less than 1,000 lb/yr, include the records associated with each calculation required by Sec. 63.2525(e) that exceeds an applicable HAP usage or emissions threshold.

(6) If you use a CEMS, and there were no periods during which it was out-of-control as specified in Sec. 63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period.

(7) Include each new operating scenario which has been operated since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or a previous compliance report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario.

(8) Records of process units added to a PUG as specified in Sec. 63.2525(i)(4) and records of primary product redeterminations as specified in Sec. 63.2525(i)(5).

(9) Applicable records and information for periodic reports as specified in referenced subparts F, G, H, SS, UU, WW, and GGG of this part and subpart F of 40 CFR part 65.

(10) Notification of process change.

(i) Except as specified in paragraph (e)(10)(ii) of this section, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all ofthe information in paragraphs (e)(10)(i)(A) through (C) of this section.

(A) A description of the process change.

(B) Revisions to any of the information reported in the original notification of compliance status report under paragraph (d) of this section.

(C) Information required by the notification of compliance status report under paragraph (d) of this section for changes involving the addition of processes or equipment at the affected source.

(ii) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraph (e)(10)(ii)(A), (B), or (C) of this section.

(A) Any change to the information contained in the precompliance report.

(B) A change in the status of a control device from small to large.

(C) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in Sec. 63.2460(b)(6)(i).

Sec. 63.2525 What records must I keep?

You must keep the records specified in paragraphs (a) through (k) of this section.

(a) Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.

(b) Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.

(1) A description of the process and the type of process equipment used.

(2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in Sec. 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.

(3) The applicable control requirements of this subpart, including the level of required control, and for vents, the level of control for each vent.

(4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.

(5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).

(6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.

(7) Calculations and engineering analyses required to demonstrate compliance.

(8) For reporting purposes, a change to any of these elements not previously reported, except for paragraph (b)(5) of this section, constitutes a new operating scenario.

(c) A schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect.

(d) The information specified in paragraphs (d)(1) and (2) of this section for Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to this subpart if some of the vents are controlled to less the percent reduction requirement.

(1) Records of whether each batch operated was considered a standard batch.

(2) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

(e) The information specified in paragraph (e)(2), (3), or (4) of this section, as applicable, for each process with Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required for situations described in paragraph (e)(1) of this section.

(1) No records are required if you documented in your notification of compliance status report that the MCPU meets any of the situations described in paragraph (e)(1)(i), (ii), or (iii) of this section.

(i) The MCPU does not process, use, or generate HAP.

(ii) You control the Group 2 batch process vents using a flare that meets the requirements of Sec. 63.987.

(iii) You control the Group 2 batch process vents using a control device for which your determination of worst case for initial compliance includes the contribution of all Group 2 batch process vents.

(2) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in Sec. 63.2460(b)(7), you must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only usage if the usage during the year is less than 10,000 lb.

(3) If you documented in your notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then you must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions.

(4) If you meet none of the conditions specified in paragraphs (e)(1) through (3) of this section, you must keep records of the information specified in paragraphs (e)(4)(i) through (iv) of this section.

(i) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

(ii) A record of whether each batch operated was considered a standard batch.

(iii) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

(iv) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

(f) A record of each time a safety device is opened to avoid unsafe conditions in accordance with Sec. 63.2450(s).

(g) Records of the results of each CPMS calibration check and the maintenance performed, as specified in Sec. 63.2450(k)(1).

(h) For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(i) For each PUG, you must keep records specified in paragraphs (i)(1) through (5) of this section.

(1) Descriptions of the MCPU and other process units in the initial PUG required by Sec. 63.2535(l)(1)(v).

(2) Rationale for including each MCPU and other process unit in the initial PUG (i.e., identify the overlapping equipment between process units) required by Sec. 63.2535(l)(1)(v).

(3) Calculations used to determine the primary product for the initial PUG required by Sec. 63.2535(l)(2)(iv).

(4) Descriptions of process units added to the PUG after the creation date and rationale for including the additional process units in the PUG as required by Sec. 63.2535(l)(1)(v).

(5) The calculation of each primary product redetermination required by Sec. 63.2535(l)(2)(iv).

(j) In the SSMP required by Sec. 63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.

(k) For each bag leak detector used to monitor PM HAP emissions from a fabric filter, maintain records of any bag leak detection alarm, including the date and time, with a brief explanation of the cause of the alarm and the corrective action taken.

Sec. 63.2535 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?

For any equipment, emission stream, or wastewater stream subject to the provisions of both this subpart and another rule, you may elect to comply only with the provisions as specified in paragraphs (a) through (l) of this section. You also must identify the subject equipment, emission stream, or wastewater stream, and the provisions with which you will comply, in your notification of compliance status report required by Sec. 63.2520(d).

(a) Compliance with other subparts of this part 63.

(1) If you have an MCPU that includes a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63, you must comply with the emission limits; operating limits; work practice standards; and the compliance, monitoring, reporting, and recordkeeping requirements for

batch process vents in this subpart, and you must continue to comply with the requirements in subparts F, G, and H of this part 63 that are applicable to the CMPU and associated equipment.

(2) After the compliance dates specified in Sec. 63.2445, at an offsite reloading or cleaning facility subject to Sec. 63.1253(f), as referenced from Sec. 63.2470(e), compliance with the monitoring, recordkeeping, and reporting provisions of any other subpart of this part 63 constitutes compliance with the monitoring, recordkeeping, and reporting provisions of Sec. 63.1253(f)(7)(ii) or Sec. 63.1253(f)(7)(iii). You must identify in your notification of compliance status report required by Sec. 63.2520(d) the subpart of this part 63 with which the owner or operator of the offsite reloading or cleaning facility complies.

(b) Compliance with 40 CFR parts 264 and 265, subparts AA, BB, and/or CC.

(1) After the compliance dates specified in Sec. 63.2445, if a control device that you use to comply with this subpart is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart AA, BB, or CC; or the monitoring and recordkeeping requirements in 40 CFR part 265, subpart AA, BB, or CC; and you comply with the periodic reporting requirements under 40 CFR part 264, subpart AA, BB, or CC that would apply to the device if your facility had final-permitted status, you may elect to comply either with the monitoring, recordkeeping, and reporting requirements of this subpart; or with the monitoring and recordkeeping requirements in 40 CFR part 264 or 265 and the reporting requirements in 40 CFR part 264, as described in this paragraph (b)(1), which constitute compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. If you elect to comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, you must report the information described in Sec. 63.2520(e).

(2) After the compliance dates specified in Sec. 63.2445, if you have an affected source with equipment that is also subject to 40 CFR part 264, subpart BB, or to 40 CFR part 265, subpart BB, then compliance with the recordkeeping and reporting requirements of 40 CFR parts 264 and/or 265 may be used to comply with the recordkeeping and reporting requirements of this subpart, to the extent that the requirements of 40 CFR parts 264 and/or 265 duplicate the requirements of this subpart.

(c) Compliance with 40 CFR part 60, subpart Kb and 40 CFR part 61, subpart Y. After the compliance dates specified in Sec. 63.2445, you are in compliance with the provisions of this subpart FFFF for any storage tank that is assigned to an MCPU and that is both controlled with a floating roof and in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y. You are in compliance with this subpart FFFF if you have a storage tank with a fixed roof, closed-vent system, and control device in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, except that you must comply with the monitoring, recordkeeping, and reporting requirements in this subpart FFFF. Alternatively, if a storage tank assigned to an MCPU is subject to control under 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, you may elect to comply only with the requirements for Group 1 storage tanks in this subpart FFFF.

(d) Compliance with subpart I, GGG, or MMM of this part 63. After the compliance dates specified in Sec. 63.2445, if you have an affected source with equipment subject to subpart I, GGG, or MMM of this part 63, you may elect to comply with the provisions of subpart H, GGG, or MMM of this part 63, respectively, for all such equipment.

(e) Compliance with subpart GGG of this part 63 for wastewater. After the compliance dates specified in Sec. 63.2445, if you have an affected source subject to this subpart and you have an affected source that generates wastewater streams that meet the applicability thresholds specified in Sec. 63.1256, you may elect to comply with the provisions of this subpart FFFF for all such wastewater streams.

(f) Compliance with subpart MMM of this part 63 for wastewater. After the compliance dates specified in Sec. 63.2445, if you have an affected source subject to this subpart, and you have an affected source that generates wastewater streams that meet the applicability thresholds specified in Sec. 63.1362(d), you

may elect to comply with the provisions of this subpart FFFF for all such wastewater streams (except that the 99 percent reduction requirement for streams subject to Sec. 63.1362(d)(10) still applies).

(g) Compliance with other regulations for wastewater. After the compliance dates specified in Sec. 63.2445, if you have a Group 1 wastewater stream that is also subject to provisions in 40 CFR parts 260 through 272, you may elect to determine whether this subpart or 40 CFR parts 260 through 272 contain the more stringent control requirements (e.g., design, operation, and inspection requirements for waste management units; numerical treatment standards; etc.) and the more stringent testing, monitoring, recordkeeping, and reporting requirements. Compliance with provisions of 40 CFR parts 260 through 272 that are determined to be more stringent than the requirements of this subpart constitute compliance with this subpart. For example, provisions of 40 CFR parts 260 through 272 for treatment units that meet the conditions specified in Sec. 63.138(h) constitute compliance with this subpart. You must identify in the notification of compliance status report required by Sec. 63.2520(d) the information and procedures that you used to make any stringency determinations.

(h) Compliance with 40 CFR part 60, subpart DDD, III, NNN, or RRR. After the compliance dates specified in Sec. 63.2445, if you have an MCPU that contains equipment subject to the provisions of this subpart that are also subject to the provisions of 40 CFR part 60, subpart DDD, III, NNN, or RRR, you may elect to apply this subpart to all such equipment in the MCPU. If an MCPU subject to the provisions of this subpart has equipment to which this subpart does not apply but which is subject to a standard in 40 CFR part 60, subpart DDD, III, NNN, or RRR, you may elect to comply with the requirements for Group 1 process vents in this subpart for such equipment. If you elect any of these methods of compliance, you must consider all total organic compounds, minus methane and ethane, in such equipment for purposes of compliance with this subpart, as if they were organic HAP. Compliance with the provisions of this subpart, in the manner described in this paragraph (h), will constitute compliance with 40 CFR part 60, subpart DDD, III, NNN, or RRR, as applicable.

(i) Compliance with 40 CFR part 61, subpart BB.

(1) After the compliance dates specified in Sec. 63.2445, a Group 1 transfer rack, as defined in Sec. 63.2550, that is also subject to the provisions of 40 CFR part 61, subpart BB, you are required to comply only with the provisions of this subpart.

(2) After the compliance dates specified in Sec. 63.2445, a Group 2 transfer rack, as defined in Sec. 63.2550, that is also subject to the provisions of 40 CFR part 61, subpart BB, is required to comply with the provisions of either paragraph (l)(2)(i) or (ii) of this section.

(i) If the transfer rack is subject to the control requirements specified in Sec. 61.302 of 40 CFR part 61, subpart BB, then you may elect to comply with either the requirements of 40 CFR part 61, subpart BB, or the requirements for Group 1 transfer racks under this subpart FFFF.

(ii) If the transfer rack is subject only to reporting and recordkeeping requirements under 40 CFR part 61, subpart BB, then you are required to comply only with the reporting and recordkeeping requirements specified in this subpart for Group 2 transfer racks, and you are exempt from the reporting and recordkeeping requirements in 40 CFR part 61, subpart BB.

(j) Compliance with 40 CFR part 61, subpart FF. After the compliance date specified in Sec. 63.2445, for a Group 1 or Group 2 wastewater stream that is also subject to the provisions of 40 CFR 61.342(c) through (h), and is not exempt under 40 CFR 61.342(c)(2) or (3), you may elect to comply only with the requirements for Group 1 wastewater streams in this subpart FFFF. If a Group 2 wastewater stream is exempted from 40 CFR 61.342(c)(1) under 40 CFR 61.342(c)(2) or (3), then you are required to comply only with the reporting and recordkeeping requirements specified in this subpart for Group 2 wastewater streams, and you are exempt from the requirements in 40 CFR part 61, subpart FF.

(k) Compliance with 40 CFR part 60, subpart VV, and 40 CFR part 61, subpart V. After the compliance date specified in Sec. 63.2445, if you have an affected source with equipment that is also subject to the

requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. After the compliance date specified in Sec. 63.2445, if you have an affected source with equipment to which this subpart does not apply, but which is subject to the requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. If you elect either of these methods of compliance, you must consider all total organic compounds, minus methane and ethane, in such equipment for purposes of compliance with this subpart, as if they were
organic HAP. Compliance with the provisions of this subpart, in the manner described in this paragraph (k), will constitute compliance with 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V, as applicable.

(l) Applicability of process units included in a process unit group. You may elect to develop and comply with the requirements for PUG in accordance with paragraphs (l)(1) through (3) of this section.

(1) Procedures to create process unit groups. Develop and document changes in a PUG in accordance with the procedures specified in paragraphs (l)(1)(i) through (v) of this section.

(i) Initially, identify an MCPU that is created from nondedicated equipment that will operate on or after November 10, 2003 and identify all processing equipment that is part of this MCPU, based on descriptions in operating scenarios.

(ii) Add to the group any other nondedicated MCPU and other nondedicated process units expected to be operated in the 5 years after the date specified in paragraph (l)(1)(i) of this section, provided they satisfy the criteria specified in paragraphs (l)(1)(ii)(A) through (C) of this section. Also identify all of the processing equipment used for each process unit based on information from operating scenarios and other applicable documentation.

(A) Each process unit that is added to a group must have some processing equipment that is also part of one or more process units in the group.

(B) No process unit may be part of more than one PUG.

(C) The processing equipment used to satisfy the requirement of paragraph (l)(1)(ii)(A) of this section may not be a storage tank or control device.

(iii) The initial PUG consists of all of the processing equipment for the process units identified in paragraphs (l)(1)(i) and (ii) of this section. As an alternative to the procedures specified in paragraphs (l)(1)(i) and (ii) of this section, you may use a PUG that was developed in accordance with Sec. 63.1360(h) as your initial PUG.

(iv) Add process units developed in the future in accordance with the conditions specified in paragraphs (l)(1)(ii)(A) and (B) of this section.

(v) Maintain records that describe the process units in the initial PUG, the procedure used to create the PUG, and subsequent changes to each PUG as specified in Sec. 63.2525(i). Submit the records in reports as specified in Sec. 63.2520(d)(2)(ix) and (e)(8).

(2) Determine primary product. You must determine the primary product of each PUG created in paragraph (l)(1) of this section according to the procedures specified in paragraphs (l)(2)(i) through (iv) of this section.

(i) The primary product is the type of product (e.g., organic chemicals subject to Sec. 63.2435(b)(1), pharmaceutical products subject to Sec. 63.1250, or pesticide active ingredients subject to Sec. 63.1360) expected to be produced for the greatest operating time in the 5-year period specified in paragraph (l)(1)(ii) of this section.

(ii) If the PUG produces multiple types of products equally based on operating time, then the primary product is the type of product with the greatest production on a mass basis over the 5-year period specified in paragraph (l)(1)(ii) of this section.

(iii) At a minimum, you must redetermine the primary product of the PUG following the procedure specified in paragraphs (l)(2)(i) and (ii) of this section every 5 years.

(iv) You must record the calculation of the initial primary product determination as specified in Sec. 63.2525(i)(3) and report the results in the notification of compliance status report as specified in Sec. 63.2520(d)(8)(ix). You must record the calculation of each redetermination of the

primary product as specified in Sec. 63.2525(i)(5) and report the calculation in a compliance report submitted no later than the report covering the period for the end of the 5th year after cessation of production of the previous primary product, as specified in Sec. 63.2520(e)(8).

(3) Compliance requirements. (i) If the primary product of the PUG is determined according to paragraph (l)(2) of this section to be material described in Sec. 63.2435(b)(1), then you must comply with this subpart for each MCPU in the PUG. You may also elect to comply with this subpart for all other process units in the PUG, which constitutes compliance with other part 63 rules.

(ii) If the primary product of the PUG is determined according to paragraph (l)(2) of this section to be material not described in Sec. 63.2435(b)(1), then you must comply with paragraph (l)(3)(ii)(A), (B), or (C) of this section, as applicable.

(A) If the primary product is subject to subpart GGG of this part 63, then comply with the requirements of subpart GGG for each MCPU in the PUG.

(B) If the primary product is subject to subpart MMM of this part 63, then comply with the requirements of subpart MMM for each MCPU in the PUG.

(C) If the primary product is subject to any subpart in this part 63 other than subpart GGG or subpart MMM, then comply with the requirements of this subpart for each MCPU in the PUG.

(iii) The requirements for new and reconstructed sources in the alternative subpart apply to all MCPU in the PUG if and only if the affected source under the alternative subpart meets the requirements for construction or reconstruction.

Sec. 63.2540 What parts of the General Provisions apply to me?

Table 12 to this subpart shows which parts of the General Provisions in Sec. Sec. 63.1 through 63.15 apply to you.

Sec. 63.2545 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency also has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the Administrator of U.S. EPA and are not delegated to the State, local, or tribal agency.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in Sec. 63.2450(a) under Sec. 63.6(g).

(2) Approval of major alternatives to test methods under Sec. 63.7(e)(2)(ii) and (f) and as defined in Sec. 63.90.

(3) Approval of major alternatives to monitoring under Sec. 63.8(f) and as defined in Sec. 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under Sec. 63.10(f) and as defined in Sec. 63.90.

Sec. 63.2550 What definitions apply to this subpart?

(a) For an affected source complying with the requirements in subpart SS of this part 63, the terms used in this subpart and in subpart SS of this part 63 have the meaning given them in Sec. 63.981, except as specified in Sec. Sec. 63.2450(k)(2) and (m), 63.2470(c)(2), 63.2475(b), and paragraph (i) of this section.

(b) For an affected source complying with the requirements in 40 CFR part 65, subpart F, the terms used in this subpart and in 40 CFR part 65, subpart F have the meaning given to them in Sec. 65.2.

(c) For an affected source complying with the requirements in subpart UU of this part 63, the terms used in this subpart and in subpart UU of this part 63 have the meaning given them in Sec. 63.1020.

(d) For an affected source complying with the requirements in subpart WW of this part 63, the terms used in this subpart and subpart WW of this part 63 have the meaning given them in Sec. 63.1061, except as specified in Sec. Sec. 63.2450(m), 63.2470(c)(2), and paragraph (i) of this section.

(e) For an affected source complying with the requirements in Sec. Sec. 63.132 through 63.149, the terms used in this subpart and Sec. Sec. 63.132 through 63.149 have the meaning given them in Sec. Sec. 63.101 and 63.111, except as specified in Sec. 63.2450(m) and paragraph (i) of this section.

(f) For an affected source complying with the requirements in Sec. Sec. 63.104 and 63.105, the terms used in this subpart and in Sec. Sec. 63.104 and 63.105 of this subpart have the meaning given them in Sec. 63.101, except as specified in Sec. Sec. 63.2450(m), 63.2490(b), and paragraph (i) of this section.

(g) For an affected source complying with requirements in Sec. Sec. 63.1253, 63.1257, and 63.1258, the terms used in this subpart and in Sec. Sec. 63.1253, 63.1257, and 63.1258 have the meaning given them in Sec. 63.1251, except as specified in Sec. 63.2450(m) and paragraph (i) of this section.

(h) For an affected source complying with the requirements in 40 CFR part 65, subpart F, the terms used in this subpart and in 40 CFR part 65, subpart F, have the meaning given them in 40 CFR 65.2.

(i) All other terms used in this subpart are defined in the Clean Air Act (CAA), in 40 CFR 63.2, and in this paragraph (i). If a term is defined in Sec. 63.2, Sec. 63.101, Sec. 63.111, Sec. 63.981, Sec. 63.1020, Sec. 63.1061, Sec. 63.1251, or Sec. 65.2 and in this paragraph (i), the definition in this paragraph (i) applies for the purposes of this subpart.

Ancillary activities means boilers and incinerators (not used to comply with the emission limits in Tables 1 through 7 to this subpart), chillers and refrigeration systems, and other equipment and activities that are not directly involved (i.e., they operate within a closed system and materials are not combined with process fluids) in the processing of raw materials or the manufacturing of a product or isolated intermediate.

Batch operation means a noncontinuous operation involving intermittent or discontinuous feed into equipment, and, in general, involves the emptying of the equipment after the operation ceases and prior to beginning a new operation. Addition of raw material and withdrawal of product do not occur simultaneously in a batch operation.

Batch process vent means a vent from a unit operation or vents from multiple unit operations within a process that are manifolded together into a common header, through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Examples of batch process vents include, but are not limited to, vents on condensers used for product recovery, reactors, filters, centrifuges, and process tanks. The following are not batch process vents for the purposes of this subpart:

(1) Continuous process vents;

(2) Bottoms receivers;

(3) Surge control vessels;

(4) Gaseous streams routed to a fuel gas system(s);

(5) Vents on storage tanks, wastewater emission sources, or pieces of equipment subject to the emission limits and work practice standards in Tables 4, 6, and 7 to this subpart;

(6) Drums, pails, and totes;

(7) Flexible elephant trunk systems that draw ambient air (i.e., the system is not ducted, piped, or otherwise connected to the unit operations) away from operators when vessels are opened; and

(8) Emission streams from emission episodes that are undiluted and uncontrolled containing less than 50 ppmv HAP are not part of any batch process vent. A vent from a unit operation, or a vent from multiple unit operations that are manifolded together, from which total uncontrolled HAP emissions are less than 200 lb/yr is not a batch process vent; emissions for all emission episodes associated with the unit operation(s) must be included in the determination of the total mass emitted. The HAP concentration or mass emission rate may be determined using any of the following: process knowledge that no HAP are present in the emission stream; an engineering assessment as discussed in Sec. 63.1257(d)(2)(ii), except that you do not need to demonstrate that the equations in Sec. 63.1257(d)(2)(i) do not apply, and the precompliance reporting requirements specified in Sec. 63.1257(d)(2)(ii)(E) do not apply for the purposes of this demonstration; equations specified in Sec. 63.1257(d)(2)(i), as applicable; test data using Method 18 of 40 CFR part 60, appendix A; or any other test method that has been validated according to the procedures in Method 301 of appendix A of this part.

Biofilter means an enclosed control system such as a tank or series of tanks with a fixed roof that contact emissions with a solid media (such as bark) and use microbiological activity to transform organic pollutants in a process vent stream to innocuous compounds such as carbon dioxide, water, and inorganic salts. Wastewater treatment processes such as aeration lagoons or activated sludge systems are not considered to be biofilters.

Bottoms receiver means a tank that collects bottoms from continuous distillation before the stream is sent for storage or for further downstream processing.

Construction means the onsite fabrication, erection, or installation of an affected source or MCPU. Addition of new equipment to an MCPU subject to existing source standards does not constitute construction, but it may constitute reconstruction of the affected source or MCPU if it satisfies the definition of reconstruction in Sec. 63.2.

Consumption means the quantity of all HAP raw materials entering a process in excess of the theoretical amount used as reactant, assuming 100 percent stoichiometric conversion. The raw materials include reactants, solvents, and any other additives. If a HAP is generated in the process as well as added as a raw material, consumption includes the quantity generated in the process.

Continuous operation means any operation that is not a batch operation.

Continuous process vent means the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream if the gas stream has the characteristics specified in Sec. 63.107(b) through (h), or meets the criteria specified in Sec. 63.107(i), except:

(1) The reference in Sec. 63.107(e) to a chemical manufacturing process unit that meets the criteria of Sec. 63.100(b) means an MCPU that meets the criteria of Sec. 63.2435(b);

(2) The reference in Sec. 63.107(h)(4) to Sec. 63.113 means Table 1 to this subpart;

(3) The references in Sec. 63.107(h)(7) to Sec. Sec. 63.119 and 63.126 mean Tables 4 and 5 to this subpart; and

(4) For the purposes of Sec. 63.2455, all references to the characteristics of a process vent (e.g., flowrate, total HAP concentration, or TRE index value) mean the characteristics of the gas stream.

(5) The reference to ``total organic HAP'' in Sec. 63.107(d) means ``total HAP'' for the purposes of this subpart FFFF.

(6) The references to an ``air oxidation reactor, distillation unit, or reactor'' in Sec. 63.107 mean any continuous operation for the purposes of this subpart.

(7) A separate determination is required for the emissions from each MCPU, even if emission streams from two or more MCPU are combined prior to discharge to the atmosphere or to a control device.

Dedicated MCPU means an MCPU that consists of equipment that is used exclusively for one process, except that storage tanks assigned to the process according to the procedures in Sec. 63.2435(d) also may be shared by other processes.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Emission point means each continuous process vent, batch process vent, storage tank, transfer rack, and wastewater stream.

Energetics means propellants, explosives, and pyrotechnics and include materials listed at 49 CFR 172.101 as Hazard Class I Hazardous Materials, Divisions 1.1 through 1.6.

Equipment means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in organic HAP service; and any control devices or systems used to comply with Table 6 to this subpart.

Excess emissions means emissions greater than those allowed by the emission limit.

Family of materials means a grouping of materials with the same basic composition or the same basic end use or functionality produced using the same basic feedstocks with essentially identical HAP emission profiles (primary constituent and relative magnitude on a pound per product basis) and manufacturing equipment configuration. Examples of families of materials include multiple grades of the same product or different variations of a product (e.g., blue, black, and red resins).

Group 1 batch process vent means each of the batch process vents in a process for which the collective uncontrolled organic HAP emissions from all of the batch process vents are greater than or equal to 10,000 lb/yr at an existing source or greater than or equal to 3,000 lb/yr at a new source.

Group 2 batch process vent means each batch process vent that does not meet the definition of Group 1 batch process vent.

Group 1 continuous process vent means a continuous process vent for which the flow rate is greater than or equal to 0.005 standard cubic meter per minute, and the total resource effectiveness index value, calculated according to Sec. 63.2455(b), is less than or equal to 1.9 at an existing source and less than or equal to 5.0 at a new source.

Group 2 continuous process vent means a continuous process vent that does not meet the definition of a Group 1 continuous process vent.

Group 1 storage tank means a storage tank with a capacity greater than or equal to 10,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 6.9 kilopascals at an existing source or greater than or equal to 0.69 kilopascals at a new source.

Group 2 storage tank means a storage tank that does not meet the definition of a Group 1 storage tank.

Group 1 transfer rack means a transfer rack that loads more than 0.65 million liters/year of liquids that contain organic HAP with a rack-weighted average partial pressure, as defined in Sec. 63.111, greater than or equal to 1.5 pound per square inch absolute.

Group 2 transfer rack means a transfer rack that does not meet the definition of a Group 1 transfer rack.

Group 1 wastewater stream means a wastewater stream consisting of process wastewater at an existing or new source that meets the criteria for Group 1 status in Sec. 63.2485(c) for compounds in Tables 8 and 9 to this subpart and/or a wastewater stream consisting of process wastewater at a new source that meets the criteria for Group 1 status in Sec. 63.132(d) for compounds in Table 8 to subpart G of this part 63.

Group 2 wastewater stream means any process wastewater stream that does not meet the definition of a Group 1 wastewater stream.

Halogen atoms mean chlorine and fluorine.

HAP metals means the metal portion of antimony compounds, arsenic compounds, beryllium compounds, cadmium compounds, chromium compounds, cobalt compounds, lead compounds, manganese compounds, mercury compounds, nickel compounds, and selenium compounds.

Halogenated vent stream means a vent stream determined to have a mass emission rate of halogen atoms contained in organic compounds of 0.45 kilograms per hour or greater determined by the procedures presented in Sec. 63.115(d)(2)(v).

Hydrogen halide and halogen HAP means hydrogen chloride, hydrogen fluoride, and chlorine.

In organic HAP service means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of Sec. 63.180(d). The provisions of Sec. 63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.

Isolated intermediate means a product of a process that is stored before subsequent processing. An isolated intermediate is usually a product of a chemical synthesis, fermentation, or biological extraction process. Storage of an isolated intermediate marks the end of a process. Storage occurs at any time the intermediate is placed in equipment used solely for storage. The storage equipment is part of the MCPU that produces the isolated intermediate and is not assigned as specified in Sec. 63.2435(d).

Large control device means a control device that controls total HAP emissions of greater than or equal to 10 tpy, before control.

Maintenance wastewater means wastewater generated by the draining of process fluid from components in the MCPU into an individual drain system in preparation for or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown. Examples of activities that can generate maintenance wastewater include descaling of heat exchanger tubing bundles, cleaning of distillation column traps, draining of pumps into an individual drain system, and draining of portions of the MCPU for repair. Wastewater from routine cleaning operations occurring as part of batch operations is not considered maintenance wastewater.

Maximum true vapor pressure has the meaning given in Sec. 63.111, except that it applies to all HAP rather than only organic HAP.

Miscellaneous organic chemical manufacturing process means all equipment which collectively function to produce a product or isolated intermediate that are materials described in Sec. 63.2435(b). For the purposes of this subpart, process includes any, all or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a product or isolated intermediate. A process is also defined by the following:

(1) Routine cleaning operations conducted as part of batch operations are considered part of the process;

(2) Each nondedicated solvent recovery operation is considered a single process;

(3) Each nondedicated formulation operation is considered a single process that is used to formulate numerous materials and/or products;

(4) Quality assurance/quality control laboratories are not considered part of any process; and

(5) Ancillary activities are not considered a process or part of any process.

(6) The end of a process that produces a solid material is either up to and including the dryer or extruder, or for a polymer production process without a dryer or extruder, it is up to and including the extruder, die plate, or solid-state reactor, except in two cases. If the dryer, extruder, die plate, or solid-state reactor is followed by an operation that is designed and operated to remove HAP solvent or residual HAP monomer from the solid, then the solvent removal operation is the last step in the process. If the dried solid is diluted or mixed with a HAP-based solvent, then the solvent removal operation is the last step in the process.

Nondedicated solvent recovery operation means a distillation unit or other purification equipment that receives used solvent from more than one MCPU.

Nonstandard batch means a batch process that is operated outside of the range of operating conditions that are documented in an existing operating scenario but is still a reasonably anticipated event. For example, a nonstandard batch occurs when additional processing or processing at different operating conditions must be conducted to produce a product that is normally produced under the conditions described by the standard batch. A nonstandard batch may be necessary as a result of a malfunction, but it is not itself a malfunction.

On-site or on site means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source or MCPU to which the records pertain, or storage in central files elsewhere at the major source.

Operating scenario means, for the purposes of reporting and recordkeeping, any specific operation of an MCPU as described by records specified in Sec. 63.2525(b).

Organic group means structures that contain primarily carbon, hydrogen, and oxygen atoms.

Organic peroxides means organic compounds containing the bivalent -o-o-structure which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

Point of determination means each point where process wastewater exits the MCPU or control device.

Note to definition for point of determination: The regulation allows determination of the characteristics of a wastewater stream: At the point of determination; or downstream of the point of determination if corrections are made for changes in flow rate and annual average concentration of soluble HAP and partially soluble HAP compounds as determined according to procedures in Sec. 63.144 of subpart G in this part 63. Such changes include losses by air emissions; reduction of annual average concentration or changes in flow rate by mixing with other water or wastewater streams; and reduction in flow rate or annual average concentration by treating or otherwise handling the wastewater stream to remove or destroy HAP.

Predominant HAP means as used in calibrating an analyzer, the single organic HAP that constitutes the largest percentage of the total organic HAP in the analyzed gas stream, by volume.

Process condenser means a condenser whose primary purpose is to recover material as an integral part of an MCPU. All condensers recovering condensate from an MCPU at or above the boiling point or all condensers in line prior to a vacuum source are considered process condensers. Typically, a primary condenser or condensers in series are considered to be integral to the MCPU if they are capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse or for sale for fuel value, use, or reuse. This definition does not apply to a condenser that is used to remove materials that would hinder performance of a downstream recovery device as follows:

(1) To remove water vapor that would cause icing in a downstream condenser, or

(2) To remove water vapor that would negatively affect the adsorption capacity of carbon in a downstream carbon adsorber, or

(3) To remove high molecular weight organic compounds or other organic compounds that would be difficult to remove during regeneration of a downstream carbon adsorber.

Process tank means a tank or vessel that is used within a process to collect material discharged from a feedstock storage tank or equipment within the process before the material is transferred to other equipment within the process or a product storage tank. A process tank has emissions that are related to the characteristics of the batch cycle, and it does not accumulate product over multiple batches. Surge control vessels and bottoms receivers are not process tanks.

Production-indexed HAP consumption factor (HAP factor) means the result of dividing the annual consumption of total HAP by the annual production rate, per process.

Production-indexed VOC consumption factor (VOC factor) means the result of dividing the annual consumption of total VOC by the annual production rate, per process.

Quaternary ammonium compounds means a type of organic nitrogen compound in which the molecular structure includes a central nitrogen atom joined to four organic groups as well as an acid radical of some sort.

Recovery device means an individual unit of equipment used for the purpose of recovering chemicals from process vent streams and from wastewater streams for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. For the purposes of meeting requirements in Table 2 to this subpart, the recovery device must not be a process condenser and must recover chemicals to be reused in a process on site. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. To be a recovery device for a wastewater stream, a decanter and any other equipment based on the operating principle of gravity separation must receive only multi-phase liquid streams.

Responsible official means responsible official as defined in 40 CFR 70.2.

Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purposes of this subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

Shutdown means the cessation of operation of a continuous operation for any purpose. Shutdown also means the cessation of a batch operation, or any related individual piece of equipment required or used to comply with this subpart, if the steps taken to cease operation differ from those described in a standard batch or nonstandard batch. Shutdown also applies to emptying and degassing storage vessels. Shutdown does not apply to cessation of batch operations at the end of a campaign or between batches within a campaign when the steps taken are routine operations.

Small control device means a control device that controls total HAP emissions of less than 10 tpy, before control.

Standard batch means a batch process operated within a range of operating conditions that are documented in an operating scenario. Emissions from a standard batch are based on the operating conditions that result in highest emissions. The standard batch defines the uncontrolled and controlled emissions for each emission episode defined under the operating scenario.

Startup means the setting in operation of a continuous operation for any purpose; the first time a new or reconstructed batch operation begins production; for new equipment added, including equipment required or used to comply with this subpart, the first time the equipment is put into operation; or for the introduction of a new product/process, the first time the product or process is run in equipment. For batch operations, startup applies to the first time the equipment is put into operation at the start of a campaign to produce a product that has been produced in the past if the steps taken to begin production differ from those specified in a standard batch or nonstandard batch. Startup does not apply when the equipment is put into operation as part of a batch within a campaign when the steps taken are routine operations.

Storage tank means a tank or other vessel that is used to store liquids that contain organic HAP and/or hydrogen halide and halogen HAP and that has been assigned to an MCPU according to the procedures in Sec. 63.2435(d). The following are not considered storage tanks for the purposes of this subpart:

(1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;

(2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;

(3) Vessels storing organic liquids that contain HAP only as impurities;

(4) Wastewater storage tanks;

(5) Bottoms receivers;

(6) Surge control vessels; and

(7) Process tanks.

Supplemental gases means the air that is added to a vent stream after the vent stream leaves the unit operation. Air that is part of the vent stream as a result of the nature of the unit operation is not considered supplemental gases. Air required to operate combustion device burner(s) is not considered supplemental gases.

Surge control vessel means feed drums, recycle drums, and intermediate vessels as part of any continuous operation. Surge control vessels are used within an MCPU when in-process storage, mixing, or management of flowrates or volumes is needed to introduce material into continuous operations.

Total organic compounds or (TOC) means the total gaseous organic compounds (minus methane and ethane) in a vent stream.

Transfer rack means the collection of loading arms and loading hoses, at a single loading rack, that are assigned to an MCPU according to the procedures specified in Sec. 63.2435(d) and are used to fill tank trucks and/or rail cars with organic liquids that contain one or more of the organic HAP listed in section 112(b) of the CAA of this subpart. Transfer rack includes the associated pumps, meters, shutoff valves, relief valves, and other piping and valves.

Unit operation means those processing steps that occur within distinct equipment that are used, among other things, to prepare reactants, facilitate reactions, separate and purify products, and recycle materials. Equipment used for these purposes includes, but is not limited to, reactors, distillation columns, extraction columns, absorbers, decanters, dryers, condensers, and filtration equipment.

Waste management unit means the equipment, structure(s), and/or device(s) used to convey, store, treat, or dispose of wastewater streams or residuals. Examples of waste management units include wastewater tanks, air flotation units, surface impoundments, containers, oil-water or organic-water separators, individual drain systems, biological wastewater treatment units, waste incinerators, and organic removal devices such as steam and air stripper units, and thin film evaporation units. If such equipment is being operated as a recovery device, then it is part of a miscellaneous organic chemical manufacturing process and is not a waste management unit.

Wastewater means water that is discarded from an MCPU or control device through a POD and that contains either: an annual average concentration of compounds in Tables 8 and 9 to this subpart of at least 5 ppmw and has an annual average flowrate of 0.02 liters per minute or greater; or an annual average concentration of compounds in Tables 8 and 9 to this subpart of at least 10,000 ppmw at any flowrate. Wastewater means process wastewater or maintenance wastewater. The following are not considered wastewater for the purposes of this subpart:

(1) Stormwater from segregated sewers;

(2) Water from fire-fighting and deluge systems, including testing of such systems;

(3) Spills;

(4) Water from safety showers;

(5) Samples of a size not greater than reasonably necessary for the method of analysis that is used;

(6) Equipment leaks;

(7) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and

(8) Noncontact cooling water.

Wastewater stream means a stream that contains only wastewater as defined in this paragraph (i).

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

Tables to Subpart FFFF of Part 63

As required in Sec. 63.2455, you must meet each emission limit and work practice standard in the following table that applies to your continuous process vents:

Table 1 to Subpart FFFF of Part 63.--Emission Limits and Work Practice Standards for Continuous Process Vents

For Each	For which	Then you must
1. Group 1 continuous process vent	a. Not applicable	i. Reduce emissions of total organic HAP by =98 percent by weight or to an outlet process concentration <=20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare); or ii. Reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare; or iii. Use a recovery device to maintain the TRE above 1.9 for an existing source or above 5.0 for a new source.
2. Halogenated Group 1 continuous process vent stream.	a. You use a combustion control device to control organic HAP emissions.	i. Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by =99 percent by weight, or to <=0.45 kg/hr, or to <=20 ppmv; or ii. Use a halogen reduction device before the combustion device to reduce the halogen atom mass emission rate to <=0.45 kg/hr or to a concentration <=2 ppmv.
3. Group 2 continuous process vent at an existing source.	You use a recovery device to maintain the TRE level >1.9 but ≤5.0.	Comply with the requirements in Sec. 63.993 and the requirements referenced
4. Group 2 continuous process vent at a new source.	You use a recovery device to maintain the TRE level >5.0 but ≤8.0.	Comply with the requirements in Sec. 63.993 and the requirements referenced

As required in § 63.2460, you must meet each emission limit and work practice standard in the following table that applies to your batch process vents:

TABLE 2 TO SUBPART FFFF OF PART 63. EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR BATCH PROCESS VENTS

For each	Then you must	And you must
1. Process with Group 1 batch process vents.	a. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥98 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices (except a flare); or	Not applicable.
	b. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥95 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of recovery devices or a biofilter, except you may elect to comply with the requirements of subpart WW of this part for any process tank; or	Not applicable.
	c. Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting through a closed-vent system to a flare or by venting through one or more closed-vent systems to any combination of control devices (excluding a flare) that reduce organic HAP to an outlet concentration ≤20 ppmv as TOC or total organic HAP.	For all other batch process vents within the process, reduce collective organic HAP emissions as specified in item 1.a and/or item 1.b of this table.

2. Halogenated Group 1 batch process vent for which you use a combustion device to control organic HAP emissions.	a. Use a halogen reduction device after the combustion control device; or	i. Reduce overall emissions of hydrogen halide and halogen HAP by ≥99 percent; or ii. Reduce overall emissions of hydrogen halide and halogen HAP to ≤0.45 kg/hr; or iii. Reduce overall emissions of hydrogen halide and halogen HAP to a concentration ≤20 ppmv.
	b. Use a halogen reduction device before the combustion control device.	Reduce the halogen atom mass emission rate to ≤0.45 kg/hr or to a concentration ≤20 ppmv.

As required in § 63.2465, you must meet each emission limit in the following table that applies to your process vents that contain hydrogen halide and halogen HAP emissions or PM HAP emissions:

TABLE 3 TO SUBPART FFFF OF PART 63.—EMISSION LIMITS FOR HYDROGEN HALIDE AND HALOGEN HAP EMISSIONS OR PM HAP EMISSIONS FROM PROCESS VENTS

For Each	You must
1. Process with uncontrolled hydrogen halide and halogen HAP emissions from process vents ≥1,000 lb/yr.	a. Reduce collective hydrogen halide and halogen HAP emissions by ≥99 percent by weight or to an outlet concentration ≤20 ppmv by venting through one or more closed-vent systems to any combination of control devices, or b. Reduce the halogen atom mass emission rate from the sum of all batch process vents and each individual continuous process vent to ≤0.45 kg/hr by venting through one or more closed-vent systems to a halogen reduction device.
2. Process at a new source with uncontrolled emissions from process vents ≥150 lb/yr of HAP metals.	Reduce overall emissions of HAP metals by ≥97 percent by weight.

As required in § 63.2470, you must meet each emission limit in the following table that applies to your storage tanks:

TABLE 4 TO SUBPART FFFF OF PART 63.—EMISSION LIMITS FOR STORAGE TANKS

For Each	For which	Then you must
1. Group 1 storage tank	a. The maximum true vapor pressure of total HAP at the storage temperature is ≥76.6 kilopascals.	i. Reduce total HAP emissions by ≥95 percent by weight or to ≤20 ppmv of TOC or organic HAP and ≤20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or ii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or iii. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with § 63.982(d) and the requirements referenced therein.
	b. The maximum true vapor pressure of total HAP at the storage temperature is ≤76.6 kilopascals.	i. Comply with the requirements of subpart WW of this part, except as specified in § 63.2470; or ii. Reduce total HAP emissions by ≥95 percent by weight or to ≤20 ppmv of TOC or organic HAP and ≤20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or iii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or iv. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with § 63.982(d) and the requirements referenced therein.
2. Halogenated vent stream from a Group 1 storage tank.	You use a combustion control device to control organic HAP emissions.	Meet one of the emission limit options specified in Item 2.a.i or ii. in Table 1 to this subpart.

As required in § 63.2475, you must meet each emission limit and work practice standard in the following table that applies to your transfer racks:

TABLE 5 TO SUBPART FFFF OF PART 63.—EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR TRANSFER RACKS

For Each	You must
1. Group 1 transfer rack	a. Reduce emissions of total organic HAP by ≥98 percent by weight or to an outlet concentration ≤20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare); or b. Reduce emissions of total organic HAP by venting emissions through a closed-vent system to a flare; or c. Reduce emissions of total organic HAP by venting emissions to a fuel gas system or process in accordance with § 63.982(d) and the requirements referenced therein; or d. Use a vapor balancing system designed and operated to collect organic HAP vapors displaced from tank trucks and railcars during loading and route the collected HAP vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected by a common header.
2. Halogenated Group 1 transfer rack vent stream for which you use a combustion device to control organic HAP emissions.	a. Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by ≥99 percent by weight, to ≤0.45 kg/hr, or to ≤20 ppmv; or b. Use a halogen reduction device before the combustion device to reduce the halogen atom mass emission rate to ≤0.45 kg/hr or to a concentration ≤20 ppmv.

As required in § 63.2480, you must meet each requirement in the following table that applies to your equipment leaks:

TABLE 6 TO SUBPART FFFF OF PART 63.—REQUIREMENTS FOR EQUIPMENT LEAKS

For all	And that is part of	You must
1. Equipment that is in organic HAP service.	a. An MCPU with no continuous process vents.	a. Comply with the requirements of subpart UU of this part 63 and the requirements referenced therein, except as specified in § 63.2480(b) and (d); or b. Comply with the requirements of subpart H of this part 63 and the requirements referenced therein, except as specified in § 63.2480(b) and (d); or c. Comply with the requirements of 40 CFR part 65, subpart F and the requirements referenced therein, except as specified in § 63.2480(c) and (d).
	b. An MCPU with at least one continuous process vent.	
2. Equipment that is in organic HAP service at a new source.	a. Any MCPU	i. Comply with the requirements of subpart UU of this part 63 and the requirements referenced therein; or ii. Comply with the requirements of 40 CFR part 65, subpart F.

As required in § 63.2485, you must meet each requirement in the following table that applies to your wastewater streams and liquid streams in open systems within an MCPU:

TABLE 7 TO SUBPART FFFF OF PART 63.—REQUIREMENTS FOR WASTEWATER STREAMS AND LIQUID STREAMS IN OPEN SYSTEMS WITHIN AN MCPU

For each	You must
1. Process wastewater stream	Comply with the requirements in §§ 63.132 through 63.148 and the requirements referenced therein, except as specified in § 63.2485.
2. Maintenance wastewater stream	Comply with the requirements in § 63.105 and the requirements referenced therein, except as specified in § 63.2485.
3. Liquid streams in an open system within an MCPU.	Comply with the requirements in § 63.149 and the requirements referenced therein, except as specified in § 63.2485.

As specified in § 63.2485, the partially soluble HAP in wastewater that are subject to management and treatment requirements in this subpart FFFF are listed in the following table:

TABLE 8 TO SUBPART FFFF OF PART 63.—PARTIALLY SOLUBLE HAZARDOUS AIR POLLUTANTS

Chemical Name and CAS No.
1. 1,1,1–Trichloroethane (methyl chloroform) 71556
2. 1,1,2,2–Tetrachloroethane 79345
3. 1,1,2–Trichloroethane 4. 1,1–Dichloroethylene (vinylidene chloride) 75354
5. 1,2–Dibromoethane 106934
6. 1,2–Dichloroethane (ethylene dichloride) 107062
7. 1,2–Dichloropropane 78875
8. 1,3–Dichloropropene 542756
9. 2,4,5–Trichlorophenol 95954
10. 1,4–Dichlorobenzene 106467

11. 2–Nitropropane 79469
12. 4–Methyl-2-pentanone (MIBK) 108101
13. Acetaldehyde 75070
14. Acrolein 107028
15. Acrylonitrile 107131
16. Allyl chloride 107051
17. Benzene 71432
18. Benzyl chloride 100447
19. Biphenyl 92524
20. Bromoform (tribromomethane) 75252
21. Bromomethane 74839
22. Butadiene 106990
23. Carbon disulfide. 75150
24. Chlorobenzene 108907
25. Chloroethane (ethyl chloride) 75003
26. Chloroform 67663
27. Chloromethane 74873
28. Chloroprene 126998
29. Cumene 98828
30. Dichloroethyl ether111444
31. Dinitrophenol 51285
32. Epichlorohydrin 106898
33. Ethyl acrylate 140885
34. Ethylbenzene 100414
35. Ethylene oxide 75218
36. Ethylidene dichloride 75343
37. Hexachlorobenzene 118741
38. Hexachlorobutadiene 87683
39. Hexachloroethane 67721
40. Methyl methacrylate 80626
41. Methyl-t-butyl ether 1634044
42. Methylene chloride 75092
43. N-hexane 110543
44. N,N-dimethylaniline 121697
45. Naphthalene 91203
46. Phosgene 75445
47. Propionaldehyde 123386
48. Propylene oxide 75569
49. Styrene 100425
50. Tetrachloroethylene (perchloroethylene) 127184
51. Tetrachloromethane (carbon tetrachloride) 56235
52. Toluene 108883
53. Trichlorobenzene (1,2,4-) 120821
54. Trichloroethylene 79016
55. Trimethylpentane 540841
56. Vinyl acetate 108054
57. Vinyl chloride 75014
58. Xylene (m) 108383
59. Xylene (o) 95476
60. Xylene (p) 106423

As specified in § 63.2485, the soluble HAP in wastewater that are subject to management and treatment requirements of this subpart FFFF are listed in the following table:

TABLE 9 TO SUBPART FFFF OF PART 63.—SOLUBLE HAZARDOUS AIR POLLUTANTS

Chemical Name and CAS No.
1. Acetonitrile 75058
2. Acetophenone 98862
3. Diethyl sulfate 64675
4. Dimethyl hydrazine (1,1) 57147
5. Dimethyl sulfate 77781
6. Dinitrotoluene (2,4) 121142
7. Dioxane (1,4) 123911
8. Ethylene glycol dimethyl ether 110714
9. Ethylene glycol monobutyl ether acetate 112072
10. Ethylene glycol monomethyl ether acetate 110496
11. Isophorone 78591
12. Methanol 67561
13. Nitrobenzene 98953

14. Toluidine (o-) 95534 15. Triethylamine 121448

As required in § 63.2490, you mustmeet each requirement in the followingtable that applies to your heat exchangesystems:

TABLE 10 TO SUBPART FFFF OF PART 63.—WORK PRACTICE STANDARDS FOR HEAT EXCHANGE SYSTEMS

For Each	You must
Heat exchange system, as defined in § 63.101	Comply with the requirements of § 63.104 and the requirements referenced therein, except as specified in § 63.2490.

As required in § 63.2520(a) and (b), you must submit each report that applies to you on the schedule shown in the following table:

TABLE 11 TO SUBPART FFFF OF PART 63.—REQUIREMENTS FOR REPORTS

You must submit a(n)	The report must contain	You must submit the report
1. Precompliance report	The information specified in § 63.2520(c).	At least 6 months prior to the compliance date; or for new sources, with the application for approval of construction or reconstruction.
2. Notification of compliance status report.	The information specified in § 63.2520(d).	No later than 150 days after the compliance date specified in § 63.2445.
3. Compliance report	The information specified in § 63.2520(e).	Semiannually according to the requirements in § 63.2520(b).

Appendix A to Subpart FFFF of Part 63--Applicability of General Provisions (Subpart A) to Subpart FFFF of Part 63

§ 63.1 Applicability.

(a) *General.*

(1) Terms used throughout this part are defined in § 63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in § 63.2.

(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.

(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.

(4) (i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.

(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61, or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60,part 61, or other part 63 subpart A (General) Provision.

(iii) The General Provisions in this Subpart A do not apply to regulations developed pursuant to section112(r) of the amended Act., unless otherwise specified in those regulations.

(5) [Reserved]

(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD–13), Research Triangle Park, North Carolina 27711.

(7) [Reserved]

(8) [Reserved]

(9) [Reserved]

(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word ''calendar'' is absent, unless otherwise specified in an applicable requirement.

(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in § 63.9(i).

(13) [Reserved]

(14) [Reserved]

(b) *Initial applicability determination for this part*.

(1) The provisions of this part apply to the owner or operator of any stationary source that -

(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and

(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.

(2) [Reserved]

(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part, must keep a record as specified in § 63.10(b)(3).

(c) *Applicability of this part after a relevant standard has been set under this part.*

(1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section.

(2) Except as provided in § 63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether –

(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);

(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or

(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.

(3) [Reserved]

(4) [Reserved]

(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.

(d) [Reserved]

(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.

§ 63.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Pub. L. 101–549, 104 Stat. 2399).

Actual emissions is defined in subpart D of this part for the purpose of granting a compliance extension for an early reduction of hazardous air pollutants.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Affected source, for the purposes of this part, means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section 112 of the Act. Each relevant standard will define the "affected source," as defined in this paragraph unless a different definition is warranted based on a published justification as to why this definition would result in significant administrative, practical, or implementation problems and why the different definition would resolve those problems. The term "affected source," as used in this part, is

separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively. This definition of "affected source," and the procedures for adopting an alternative definition of "affected source," shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002.

Alternative emission limitation means conditions established pursuant to sections 112(i)(5) or 112(i)(6) of the Act by the Administrator or by a State with an approved permit program.

Alternative emission standard means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act.

Alternative test method means any method of sampling and analyzing for an air pollutant that is not a test method in this chapter and that has been demonstrated to the Administrator's satisfaction, using Method 301 in Appendix A of this part, to produce results adequate for the Administrator's determination that it may be used in place of a test method specified in this part.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).

Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

Commenced means, with respect to construction or reconstruction of an affected source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

Compliance schedule means:

(1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or

(2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached; or

(3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction non-compliance with, the applicable requirements on which it is based.

Construction means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this

section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Continuous opacity monitoring system (COMS) means a continuous monitoring system that measures the opacity of emissions.

Continuous parameter monitoring system means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Effective date means:

(1) With regard to an emission standard established under this part, the date of promulgation in the FEDERAL REGISTER of such standard; or

(2) With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of this part.

Emission standard means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

Emissions averaging is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

EPA means the United States Environmental Protection Agency.

Equivalent emission limitation means any maximum achievable control technology emission limitation or requirements which are applicable to a major source of hazardous air pollutants and are adopted by the Administrator (or a State with an approved permit program) on a case-by-case basis, pursuant to section 112(g) or (j) of the Act.

Excess emissions and continuous monitoring system performance report is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

Existing source means any affected source that is not a new source.

Federally enforceable means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

(1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;

(2) New source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;

(3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;

(4) Limitations and conditions that are part of an approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP);

(5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;

(6) Limitations and conditions that are part of an operating permit where the permit and the permitting program pursuant to which it was issued meet all of the following criteria:

(i) The operating permit program has been submitted to and approved by EPA into a State implementation plan (SIP) under section 110 of the CAA;

(ii) The SIP imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not "federally enforceable" by EPA;

(iii) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the SIP or enforceable under the SIP, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are otherwise "federally enforceable";

(iv) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter; and

(v) The permit in question was issued only after adequate and timely notice and opportunity for comment for EPA and the public.

(7) Limitations and conditions in a State rule or program that has been approved by the EPA under subpart E of this part for the purposes of implementing and enforcing section 112; and

(8) Individual consent agreements that the EPA has legal authority to create.

Fixed capital cost means the capital needed to provide all the depreciable components of an existing source.

Fugitive emissions means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

Hazardous air pollutant means any air pollutant listed in or pursuant to section 112(b) of the Act.

Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.

Major source means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Monitoring means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of four elements:

(1) Indicator(s) of performance -- the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. Indicators of performance may include direct or predicted emissions measurements (including opacity), operational parametric values that correspond to process or control device (and capture system) efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design

characteristics. Indicators may be expressed as a single maximum or minimum value, a function of process variables (for example, within a range of pressure drops), a particular operational or work practice status (for example, a damper position, completion of a waste recovery task, materials tracking), or an interdependency between two or among more than two variables.

(2) Measurement techniques -- the means by which you gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making records of process conditions or work practices.

(3) Monitoring frequency -- the number of times you obtain and record monitoring data over a specified time interval. Examples of monitoring frequencies include at least four points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity monitoring systems, and at least once per operating day (or week, month, etc.) for work practice or design inspections.

(4) Averaging time -- the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm.

New affected source means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory that is subject to a section 112(d) or other relevant standard for new sources. This definition of "new affected source," and the criteria to be utilized in implementing it, shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002. Each relevant standard will define the term "new affected source," which will be the same as the "affected source" unless a different collection is warranted based on consideration of factors including:

(1) Emission reduction impacts of controlling individual sources versus groups of sources;

(2) Cost effectiveness of controlling individual equipment;

(3) Flexibility to accommodate common control strategies;

(4) Cost/benefits of emissions averaging;

(5) Incentives for pollution prevention;

(6) Feasibility and cost of controlling processes that share common equipment (e.g., product recovery devices);

(7) Feasibility and cost of monitoring; and

(8) Other relevant factors.

New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part establishing an emission standard applicable to such source.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

Owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source..

Performance audit means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Permit modification means a change to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permit revision means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permitting authority means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Reconstruction means the replacement of components of an affected or a previously unaffected stationary source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Regulation promulgation schedule means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in the FEDERAL REGISTER.

Relevant standard means:

(1) An emission standard;

(2) An alternative emission standard;

(3) An alternative emission limitation; or

(4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the collection of equipment, activities, or both regulated by such standard or limitation. A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes subpart A of this part, as provided by § 63.1(a)(4), and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Administrator.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).

(4) For affected sources (as defined in this part) applying for or subject to a title V permit: ''responsible official'' shall have the same meaning as defined in part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever is applicable.

Run means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.

Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose.

Six-minute period means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.

Standard conditions means a temperature of 293 ^{o}K (68° F) and a pressure of 101.3 kilopascals (29.92 in. Hg).

Startup means the setting in operation of an affected source for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement:

(1) The provisions of this part and/or

(2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Test method means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of this chapter, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of appendix A of this part.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Visible emission means the observation of an emission of opacity or optical density above the threshold of vision.

Working day means any day on which Federal Government offices (or State government offices for a State that has obtained delegation under section 112(l)) are open for normal business. Saturdays, Sundays, and official Federal (or where delegated, State) holidays are not working days.

§ 63.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A = ampere
g = gram
Hz = hertz
J = joule
°K = degree Kelvin
kg = kilogram

l = liter
m = meter
m^3 = cubic meter
mg = milligram = 10^{-3} gram
ml = milliliter = 10^{-3} liter
mm = millimeter = 10^{-3} meter
Mg = megagram = 10^{6} gram = metric ton
MJ = megajoule
mol = mole
N = newton
ng = nanogram = 10^{-9} gram
nm = nanometer = 10^{-9} meter
Pa = pascal
s = second
V = volt
W = watt
Ω = ohm
μg = microgram = 10^{-6} gram
μl = microliter = 10^{-6} liter

(b) Other units of measure:

Btu = British thermal unit
°C = degree Celsius (centigrade)
cal = calorie
cfm = cubic feet per minute
cc = cubic centimeter
cu ft = cubic feet
d = day
dcf = dry cubic feet
dcm = dry cubic meter
dscf = dry cubic feet at standard conditions
dscm = dry cubic meter at standard conditions
eq = equivalent
°F = degree Fahrenheit
ft = feet
ft^2 = square feet
ft^3 = cubic feet
gal = gallon
gr = grain
g-eq = gram equivalent
g-mole = gram mole
hr = hour
in. = inch
in. H_2O = inches of water
K = 1,000
kcal = kilocalorie
lb = pound
lpm = liter per minute
meq = milliequivalent
min = minute
MW = molecular weight
oz = ounces

ppb = parts per billion
ppbw = parts per billion by weight
ppbv = parts per billion by volume
ppm = parts per million
ppmw = parts per million by weight
ppmv = parts per million by volume
psia = pounds per square inch absolute
psig = pounds per square inch gage
°R = degree Rankine
scf = cubic feet at standard conditions
scfh = cubic feet at standard conditions per hour
scm = cubic meter at standard conditions
scmm= cubic meter at standard conditions per minute
sec = second
sq ft = square feet
std = at standard conditions
v/v = volume per volume
yd^2 = square yards
yr = year

(c) Miscellaneous:
act = actual
avg = average
I.D. = inside diameter
M = molar
N = normal
O.D. = outside diameter
% = percent

§ 63.4 Prohibited activities and circumvention.

(a) *Prohibited activities*.

(1) No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under section 112(i)(4) of the Act.

(2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

(3) [Reserved]

(4) [Reserved]

(5) [Reserved]

(b) *Circumvention.* No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to

(1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;

(2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and

(3) [Reserved]

(c) *Severability.* Notwithstanding any requirement incorporated into a title V permit obtained by an owner or operator subject to the provisions of this part, the provisions of this part are federally enforceable.

§ 63.5 Preconstruction review and notification requirements.

(a) *Applicability.*

(1) This section implements the preconstruction review requirements of section 112(i)(1) for sources subject to a relevant emission standard that has been promulgated in this part. In addition, this section includes other requirements for constructed and reconstructed stationary sources that are or become subject to a relevant promulgated emission standard.

(2) After the effective date of a relevant standard promulgated under this part, the requirements in this section apply to owners or operators who construct a new source or reconstruct a source after the proposal date of that standard. New or reconstructed sources that start up before the standard's effective date are not subject to the preconstruction review requirements specified in paragraphs (b)(3), (d), and (e) of this section.

(b) *Requirements for existing, newly constructed, and reconstructed sources*.

(1) A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

(2) [Reserved]

(3) After the effective date of any relevant standard promulgated by the Administrator under this part, no person may, without obtaining written approval in advance from the Administrator in accordance with the procedures specified in paragraphs (d) and (e) of this section, do any of the following:

(i) Construct a new affected source that is major-emitting and subject to such standard;

(ii) Reconstruct an affected source that is major-emitting and subject to such standard; or

(iii) Reconstruct a major source such that the source becomes an affected source that is major-emitting and subject to the standard.

(4) After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in § 63.9(b).

(5) [Reserved]

(6) After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

(c) [Reserved]

(d) *Application for approval of construction or reconstruction*. The provisions of this paragraph implement section 112(i)(1) of the Act.

(1) *General application requirements*.

(i) An owner or operator who is subject to the requirements of paragraph (b)(3) of this section must submit to the Administrator an application for approval of the construction or reconstruction. The application must be submitted as soon as practicable before actual construction or reconstruction begins. The application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of § 63.9(b)(5). The owner or operator may submit the application for approval well in advance of the date actual construction or reconstruction begins in order to ensure a timely review by the Administrator and that the planned date to begin will not be delayed.

(ii) A separate application shall be submitted for each construction or reconstruction. Each application for approval of construction or reconstruction shall include at a minimum:

(A) The applicant's name and address;

(B) A notification of intention to construct a new major affected source or make any physical or operational change to a major affected source that may meet or has been determined to meet the criteria for a reconstruction, as defined in § 63.2 or in the relevant standard;

(C) The address (i.e., physical location) or proposed address of the source;

(D) An identification of the relevant standard that is the basis of the application;

(E) The expected date of the beginning of actual construction or reconstruction;

(F) The expected completion date of the construction or reconstruction;

(G) [Reserved]

(H) The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in the relevant standard, or if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source reported in units and averaging times specified in the relevant standard. The owner or operator may submit percent reduction information if a relevant standard is established in terms of percent reduction.
However, operating parameters, such as flow rate, shall be included in the submission to the extent that they demonstrate performance and compliance; and

(I) [Reserved]

(J) Other information as specified in paragraphs (d)(2) and (d)(3) of this section.

(iii) An owner or operator who submits estimates or preliminary information in place of the actual emissions data and analysis required in paragraphs (d)(1)(ii)(H) and (d)(2) of this section shall submit the actual, measured emissions data and other correct information as soon as available but no later than with the notification of compliance status required in § 63.9(h) (see § 63.9(h)(5)).

(2) *Application for approval of construction.* Each application for approval of construction must include, in addition to the information required in paragraph (d)(1)(ii) of this section, technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including an identification of each type of emission point for each type of hazardous air pollutant that is emitted (or could reasonably be anticipated to be emitted) and a description of the planned air pollution control system (equipment or method) for each emission point. The description of the equipment to be used for the control of emissions must include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions must include an estimated control efficiency (percent) for that method. Such technical information must include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations.

(3) *Application for approval of reconstruction*. Each application for approval of reconstruction shall include, in addition to the information required in paragraph (d)(1)(ii) of this section - (i) A brief description of the affected source and the components that are to be replaced;

(ii) A description of present and proposed emission control systems (i.e., equipment or methods). The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations;

(iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;

(iv) The estimated life of the affected source after the replacements; and

(v) A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.

(vi) If in the application for approval of reconstruction the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or other requirements, the owner or operator need not submit the information required in paragraphs (d)(3)(iii) through (d)(3)(v) of this section.

(4) *Additional information*. The Administrator may request additional relevant information after the submittal of an application for approval of construction or reconstruction.

(e) *Approval of construction or reconstruction.*

(1) (i) If the Administrator determines that, if properly constructed, or reconstructed, and operated, a new or existing source for which an application under paragraph (d) of this section was submitted will not cause emissions in violation of the relevant standard(s) and any other federally enforceable requirements, the Administrator will approve the construction or reconstruction.

(ii) In addition, in the case of reconstruction, the Administrator's determination under this paragraph will be based on:

(A) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;

(B) The estimated life of the source after the re-placements compared to the life of a comparable entirely new source;

(C) The extent to which the components being replaced cause or contribute to the emissions from the source; and

(D) Any economic or technical limitations on compliance with relevant standards that are inherent in the proposed replacements.

(2) (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of construction or reconstruction within 60 calendar days after receipt of sufficient information to evaluate an application submitted under paragraph (d) of this section. The 60-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(3) Before denying any application for approval of construction or reconstruction, the Administrator will notify the applicant of the Administrator's intention to issue the denial together with -

(i) Notice of the information and findings on which the intended denial is based; and

(ii) Notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator to enable further action on the application.

(4) A final determination to deny any application for approval will be in writing and will specify the grounds on which the denial is based. The final determination will be made within 60 calendar days of presentation of additional information or arguments (if the application is complete), or within 60 calendar days after the final date specified for presentation if no presentation is made.

(5) Neither the submission of an application for approval nor the Administrator's approval of construction or reconstruction shall -

(i) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(ii) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(f) *Approval of construction or reconstruction based on prior State preconstruction review.*

(1) Preconstruction review procedures that a State utilizes for other purposes may also be utilized for purposes of this section if the procedures are substantially equivalent to those specified in this section. The Administrator will approve an application for construction or reconstruction specified in paragraphs (b)(3) and (d) of this section if the owner or operator of a new affected source or reconstructed affected source, who is subject to such requirement meets the following conditions:

(i) The owner or operator of the new affected source or reconstructed affected source has undergone a preconstruction review and approval process in the State in which the source is (or would be) located and has received a federally enforceable construction permit that contains a finding that the source will meet the relevant promulgated emission standard, if the source is properly built and operated.

(ii) Provide a statement from the State or other evidence (such as State regulations) that it considered the factors specified in paragraph (e)(1) of this section.

(2) The owner or operator must submit to the Administrator the request for approval of construction or reconstruction under this paragraph (f)(2) no later than the application deadline specified in paragraph (d)(1) of this section (see also § 63.9(b)(2)). The owner or operator must include in the request information sufficient for the Administrator's determination. The Administrator will evaluate the owner or operator's request in accordance with the procedures specified in paragraph (e) of this section. The Administrator may request additional relevant information after the submittal of a request for approval of construction or reconstruction under this paragraph (f)(2).

§ 63.6 Compliance with standards and maintenance requirements.

(a) *Applicability.*

(1) The requirements in this section apply to the owner or operator of affected sources for which any relevant standard has been established pursuant to section 112 of the Act and the applicability of such requirements is set out in accordance with § 63.1(a)(4) unless --

(i) The Administrator (or a State with an approved permit program) has granted an extension of compliance consistent with paragraph (i) of this section; or

(ii) The President has granted an exemption from compliance with any relevant standard in accordance with section 112(i)(4) of the Act.

(2) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source, such source shall be subject to the relevant emission standard or other requirement.

(b) *Compliance dates for new and reconstructed sources.*

(1) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after proposal of a relevant standard that has an initial startup before the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard not later than the standard's effective date.

(2) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source that has an initial startup after the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard upon startup of the source.

(3) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under this part pursuant to section 112(d), 112(f), or 112(h) of the Act but before the effective date (that is, promulgation) of such standard shall comply with the relevant emission standard not later than the date 3 years after the effective date if:

(i) The promulgated standard (that is, the relevant standard) is more stringent than the proposed standard; for purposes of this paragraph, a finding that controls or compliance methods are "more stringent" must include control technologies or performance criteria and compliance or compliance assurance methods that are different but are substantially equivalent to those required by the promulgated rule, as determined by the Administrator (or his or her authorized representative); and

(ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.

(4) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of a relevant standard established pursuant to section 112(f) shall not be required to comply with the section 112(f) emission standard until the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112(f) standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator must comply with the standard as provided in paragraphs (b)(1) and (2) of this section.

(5) The owner or operator of a new source that is subject to the compliance requirements of paragraph (b)(3) or (4) of this section must notify the Administrator in accordance with § 63.9(d).

(6) [Reserved]

(7) When an area source becomes a major source by the addition of equipment or operations that meet the definition of new affected source in the relevant standard, the portion of the existing facility that is a new affected source must comply with all requirements of that standard applicable to new sources. The source owner or operator must comply with the relevant standard upon startup.

(c) *Compliance dates for existing sources.*

(1) After the effective date of a relevant standard established under this part pursuant to section 112(d) or 112(h) of the Act, the owner or operator of an existing source shall comply with such standard by the compliance date established by the Administrator in the applicable subpart(s) of this part. Except as otherwise provided for in section 112 of the Act, in no case will the compliance date established for an

existing source in an applicable subpart of this part exceed 3 years after the effective date of such standard.

(2) If an existing source is subject to a standard established under this part pursuant to section 112(f) of the Act, the owner or operator must comply with the standard by the date 90 days after the standard's effective date, or by the date specified in an extension granted to the source by the Administrator under paragraph (i)(4)(ii) of this section, whichever is later.

(3)–(4) [Reserved]

(5) Except as provided in paragraph (b)(7) of this section, the owner or operator of an area source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source shall be subject to relevant standards for existing sources. Such sources must comply by the date specified in the standards for existing area sources that become major sources. If no such compliance date is specified in the standards, the source shall have a period of time to comply with the relevant emission standard that is equivalent to the compliance period specified in the relevant standard for existing sources in existence at the time the standard becomes effective.

(d) [Reserved]

(e) *Operation and maintenance requirements.*

(1) (i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

(ii) Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

(2) [Reserved]

(3) Startup, shutdown, and malfunction plan. **Applies, except for information regarding Group 2 emission points, and equipment leaks is not required in the SSMP, as specified in Sec.63.2525(j).**

(i) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard.

(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(ii) [Reserved]

(iii)-(iv) **No, Sec. 63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify the recordkeeping requirement for SSM events, and Sec. 63.2520(e)(4) specifies reporting requirements.**

(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.

(vii) Based on the results of a determination made under paragraph (e)(1)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(A) Does not address a startup, shutdown, or malfunction event that has occurred;

(B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

(D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in § 63.2.

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides

otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by § 63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

(ix) The title V permit for an affected source must require that the owner or operator develop a startup, shutdown, and malfunction plan which conforms to the provisions of this part, but may do so by citing to the relevant subpart or subparagraphs of paragraph (e) of this section. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter and the elements of the startup, shutdown, and malfunction plan shall not be considered an applicable requirement as defined in Sec. 70.2 and Sec. 71.2 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

(f) *Compliance with nonopacity emission standards* -

(1) *Applicability.* The non-opacity emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.

(2) *Methods for determining compliance*.

(i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in § 63.7, unless otherwise specified in an applicable subpart of this part.

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in § 63.6(e) and applicable subparts of this part.

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if -

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

(B) The performance test was conducted under representative operating conditions for the source;

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in § 63.7(e) of this subpart; and

(D) The performance test was appropriately quality-assured, as specified in § 63.7(c).

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

(3) *Finding of compliance*. The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

(g) *Use of an alternative nonopacity emission standard*.

(1) If, in the Administrator's judgment, an owner or operator of an affected source has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. Any FEDERAL REGISTER notice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.

(2) An owner or operator requesting permission under this paragraph shall, unless otherwise specified in an applicable subpart, submit a proposed test plan or the results of testing and monitoring in accordance with § 63.7 and § 63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in § 63.7 and § 63.8.

(3) The Administrator may establish general procedures in an applicable subpart that accomplish the requirements of paragraphs (g)(1) and (g)(2) of this section.

(h) *Compliance with opacity and visible emission standards* –**Only for flares for which Method 22 observations are required as part of a flare compliance assessment.**

(1) *Applicability*. The opacity and visible emission standards set forth in this part must apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.

(2) Methods for determining compliance.

(i) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable subpart. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance with numerical opacity emission standards in this part, compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting

observations in accordance with Test Method 9 in appendix A of part 60 of this chapter or the method specified in paragraph (h)(7)(ii) of this section. Whenever a visible emission test method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of part 60 of this chapter.

(ii) [Reserved]

(iii) If an affected source undergoes opacity or visible emission testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if -

(A) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;

(B) The opacity or visible emission test was conducted under representative operating conditions for the source;

(C) The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in § 63.7(e); and

(D) The opacity or visible emission test was appropriately quality-assured, as specified in § 63.7(c) of this section.

(3) [Reserved]

(4) *Notification of opacity or visible emission observations*. The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting opacity or visible emission observations in accordance with § 63.9(f), if such observations are required for the source by a relevant standard.

(5) *Conduct of opacity or visible emission observations.* When a relevant standard under this part includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:

(i) For the purpose of demonstrating initial compliance, opacity or visible emission observations shall be conducted concurrently with the initial performance test required in § 63.7 unless one of the following conditions applies:

(A) If no performance test under § 63.7 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new sources that start up before the standard's effective date. If no performance test under § 63.7 is required, opacity or visible emission observations shall be conducted within 120 days after the compliance date for an existing or modified source; or

(B) If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under § 63.7, or within the time period specified in paragraph (h)(5)(i)(A) of this section, the source's owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under § 63.7. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Test Method 9 or Test Method 22 in appendix A of part 60 of this chapter.

(ii) For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours (30 6-minute averages) for the performance test or other required set of observations (e.g., for fugitive-type emission sources subject only to an opacity emission standard).

(iii) The owner or operator of an affected source to which an opacity or visible emission standard in this part applies shall conduct opacity or visible emission observations in accordance with the

provisions of this section, record the results of the evaluation of emissions, and report to the Administrator the opacity or visible emission results in accordance with the provisions of § 63.10(d).

(iv) [Reserved]

(v) Opacity readings of portions of plumes that contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity emission standards.

(6) *Availability of records.* The owner or operator of an affected source shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.

(7) *Use of a continuous opacity monitoring system.*

(i) The owner or operator of an affected source required to use a continuous opacity monitoring system (COMS) shall record the monitoring data produced during a performance test required under § 63.7 and shall furnish the Administrator a written report of the monitoring results in accordance with the provisions of § 63.10(e)(4).

(ii) Whenever an opacity emission test method has not been specified in an applicable subpart, or an owner or operator of an affected source is required to conduct Test Method 9 observations (see appendix A of part 60 of this chapter), the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under § 63.7 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the Administrator
of that decision, in writing, simultaneously with the notification under § 63.7(b) of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under § 63.7, unless the owner or operator notifies the Administrator in writing to the contrary not later than with the notification under § 63.7(b) of the date the subsequent performance test is scheduled to begin.

(iii) For the purposes of determining compliance with the opacity emission standard during a performance test required under § 63.7 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.

(iv) The owner or operator of an affected source using a COMS for compliance purposes is responsible for demonstrating that he/she has complied with the performance evaluation requirements of § 63.8(e), that the COMS has been properly maintained, operated, and data quality-assured, as specified in § 63.8(c) and § 63.8(d), and that the resulting data have not been altered in any way.

(v) Except as provided in paragraph (h)(7)(ii) of this section, the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in § 63.8(c), and met Performance Specification 1 in appendix B of part 60 of this chapter, and that the resulting data have not been altered in any way.

(8) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard (including the written reports of the results of the performance tests required by § 63.7, the results of Test Method 9 or another required opacity or visible emission test method, the observer certification required by paragraph (h)(6) of this section, and the continuous opacity monitoring system results, whichever is/are applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.

(9) *Adjustment to an opacity emission standard.*

(i) If the Administrator finds under paragraph (h)(8) of this section that an affected source is in compliance with all relevant standards for which initial performance tests were conducted under § 63.7, but during the time such performance tests were conducted fails to meet any relevant opacity emission standard, the owner or operator of such source may petition the Administrator to make

appropriate adjustment to the opacity emission standard for the affected source. Until the Administrator notifies the owner or operator of the appropriate adjustment, the relevant opacity emission standard remains applicable.

(ii) The Administrator may grant such a petition upon a demonstration by the owner or operator that -

(A) The affected source and its associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the performance tests;

(B) The performance tests were performed under the conditions established by the Administrator; and

(C) The affected source and its associated air pollution control equipment were incapable of being adjusted or operated to meet the relevant opacity emission standard.

(iii) The Administrator will establish an adjusted opacity emission standard for the affected source meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity emission standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity emission standard in the FEDERAL REGISTER.

(iv) After the Administrator promulgates an adjusted opacity emission standard for an affected source, the owner or operator of such source shall be subject to the new opacity emission standard, and the new opacity emission standard shall apply to such source during any subsequent performance tests.

(i) *Extension of compliance with emission standards.*

(1) Until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part.

(2) *Extension of compliance for early reductions and other reductions*

(i) *Early reductions*. Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator (or the State with an approved permit program) will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D.

(ii) *Other reductions*. Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) (as defined in section 169(3) of the Act) or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

(3) *Request for extension of compliance*. Paragraphs (i)(4) through (i)(7) of this section concern requests for an extension of compliance with a relevant standard under this part (except requests for an extension of compliance under paragraph (i)(2)(i) of this section will be handled through procedures specified in subpart D of this part).

(4) (i) (A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 1-year extension of

compliance is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) Any request under this paragraph for an extension of compliance with a relevant standard must be submitted in writing to the appropriate authority no later than 120 days prior to the affected source's compliance date (as specified in paragraphs (b) and (c) of this section), except as provided for in paragraph (i)(4)(i)(C) of this section. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the date of denial. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards.

(C) An owner or operator may submit a compliance extension request after the date specified in paragraph (i)(4)(i)(B) of this section provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date and the need arose due to circumstances beyond reasonable control of the owner or operator. This request must include, in addition to the information required in paragraph (i)(6)(i) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the original compliance date.

(ii) The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a relevant standard under this paragraph must be submitted in writing to the Administrator not later than 90 calendar days after the effective date of the relevant standard.

(5) The owner or operator of an existing source that has installed BACT or technology required to meet LAER [as specified in paragraph (i)(2)(ii) of this section] prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(6) (i) The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:

(A) A description of the controls to be installed to comply with the standard;

(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(*1*) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated; and

(*2*) The date by which final compliance is to be achieved;

(C) [Reserved]

(D) [Reserved]

(ii) The request for a compliance extension under paragraph (i)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(7) Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

(8) *Approval of request for extension of compliance*. Paragraphs (i)(9) through (i)(14) of this section concern approval of an extension of compliance requested under paragraphs (i)(4) through (i)(6) of this section.

(9) Based on the information provided in any request made under paragraphs (i)(4) through (i)(6) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with an emission standard, as specified in paragraphs (i)(4) and (i)(5) of this section.

(10) The extension will be in writing and will -

(i) Identify each affected source covered by the extension;

(ii) Specify the termination date of the extension;

(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;

(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and

(v) (A) Under paragraph (i)(4), specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or

(B) Under paragraph (i)(5), specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.

(11) The owner or operator of an existing source that has been granted an extension of compliance under paragraph (i)(10) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (i)(10) of this section.

(12) (i) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(i) or (i)(5) of this section. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she

is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with -

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.

(iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(13) (i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with -

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

(iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(14) The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraph (i)(10)(iii) or (iv) of this section is not met. Upon a determination to terminate, the Administrator will notify, in writing, the owner or operator of the Administrator's determination to terminate, together with:

(i) Notice of the reason for termination; and

(ii) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the determination to terminate, additional information or arguments to the Administrator before further action on the termination.

(iii) A final determination to terminate an extension of compliance will be in writing and will set forth the specific grounds on which the termination is based. The final determination will be made within 30 calendar days after presentation of additional information or arguments, or

within 30 calendar days after the final date specified for the presentation if no presentation is made.

(15) [Reserved]

(16) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.

(j) *Exemption from compliance with emission standards*. The President may exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years.

§ 63.7 Performance testing requirements.

(a) *Applicability and performance test dates.* **Applies except substitute 150days for 180days.**

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) If required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of paragraph (c)(3)(ii)(B) of this section apply, the owner or operator of the affected source must perform such tests within 180 days of the compliance date for such source.

(i)- (viii) [Reserved]

(ix) When an emission standard promulgated under this part is more stringent than the standard proposed (see § 63.6(b)(3)), the owner or operator of a new or reconstructed source subject to that standard for which construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the owner or operator may choose to demonstrate compliance with either the proposed or the promulgated standard. If the owner or operator chooses to comply with the proposed standard initially, the owner or operator shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source, whichever is later, to demonstrate compliance with the promulgated standard.

(3) The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act. **Applies and this paragraph also applies to flare compliance assessments as specified under Sec. 63.997(b)(2).**

(b) *Notification of performance test.*

(1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review an approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test.

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in paragraph (b)(1) of this section due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(c) *Quality assurance program*. **Applies except the test plan must be submitted with the notification of the performance test if the control device controls batch process vents.**

(1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test.

(2) (i) *Submission of site-specific test plan*. Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.

(iii) The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test. The PA's consist of blind audit samples provided by the Administrator and analyzed during the performance test in order to provide a measure of test data bias. The external QA program may also include systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iv) The owner or operator of an affected source shall submit the site-specific test plan to the Administrator upon the Administrator's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under paragraph (b) of this section, or on a mutually agreed upon date.

(v) The Administrator may request additional relevant information after the submittal of a site-specific test plan.

(3) *Approval of site-specific test plan*.

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under paragraph (c)(3)(i)(B) of this section. Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator's intention to disapprove the plan together with -

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan.

(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in paragraph (c)(3)(i) of this section, the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see paragraph (e)(2)(i) of this section), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see paragraph (f) of this section). However, the owner or operator is

authorized to conduct the performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(iii) Neither the submission of a site-specific test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall -

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) (i) *Performance test method audit program.* The owner or operator must analyze performance audit (PA) samples during each performance test. The owner or operator must request performance audit materials 30 days prior to the test date. Audit materials including cylinder audit gases may be obtained by contacting the appropriate EPA Regional Office or the responsible enforcement authority.

(ii) The Administrator will have sole discretion to require any subsequent remedial actions of the owner or operator based on the PA results.

(iii) If the Administrator fails to provide required PA materials to an owner or operator of an affected source in time to analyze the PA samples during a performance test, the requirement to conduct a PA under this paragraph shall be waived for such source for that performance test. Waiver under this paragraph of the requirement to conduct a PA for a particular performance test does not constitute a waiver of the requirement to conduct a PA for future required performance tests.

(d) *Performance testing facilities*. If required to do performance testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source, shall provide performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source. This includes:

(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

(2) Safe sampling platform(s);

(3) Safe access to sampling platform(s);

(4) Utilities for sampling and testing equipment; and

(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

(e) *Conduct of performance tests*.

(1) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under

§ 63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. **Applies except that the performance tests for batch process vents must be conducted under worst-case conditions as specified in Sec.63.2460.**

(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of this chapter unless the Administrator -

(i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in § 63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see paragraph (c) of this section); or

(ii) Approves the use of an intermediate or major change or alternative to a test method (see definitions in § 63.90(a)), the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or

(iii) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or

(iv) Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that

(i) A sample is accidentally lost after the testing team leaves the site; or

(ii) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or

(iii) Extreme meteorological conditions occur; or

(iv) Other circumstances occur that are beyond the owner or operator's control.

(4) Nothing in paragraphs (e)(1) through (e)(3) of this section shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(f) *Use of an alternative test method* -

(1) *General*. Until authorized to use an intermediate or major change or alternative to a test method, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator -

(i) Notifies the Administrator of his or her intention to use an alternative test method at least 60 days before the performance test is scheduled to begin;

(ii) Uses Method 301 in appendix A of this part to validate the alternative test method. This may include the use of specific procedures of Method 301 if use of such procedures are sufficient to validate the alternative test method; and

(iii) Submits the results of the Method 301 validation process along with the notification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this paragraph well in advance of the deadline specified in paragraph (f)(2)(i) of this section to ensure a timely review by the

Administrator in order to meet the performance test date specified in this section or the relevant standard.

(3) The Administrator will determine whether the owner or operator's validation of the proposed alternative test method is adequate and issue an approval or disapproval of the alternative test method. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method. However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval/disapproval 45 days after submission of the request to use an alternative method and the request satisfies the requirements in paragraph (f)(2) of this section. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(4) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.

(5) If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of such source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method as allowed under § 63.7(f).

(6) Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator’s responsibility to comply with the requirements of this part.

(g) *Data analysis, recordkeeping, and reporting.*

(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is ‘‘completed’’ when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Administrator before the, close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator (see § 63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under § 63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.

(2) [Reserved]

(3) For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.

(h) *Waiver of performance tests*.

(1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) Request to waive a performance test.

(i) If a request is made for an extension of compliance under § 63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under paragraph (c) of this section is not submitted.

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under § 63.6(I), § 63.9(h), and § 63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least 60 days before the performance test if the site-specific test plan required under paragraph (c) of this section is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

(4) Approval of request to waive performance test. The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (h)(3) of this section when he/she -

(i) Approves or denies an extension of compliance under § 63.6(i)(8); or

(ii) Approves or disapproves a site-specific test plan under § 63.7(c)(3); or

(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

§ 63.8 Monitoring requirements.

(a) *Applicability.*

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) For the purposes of this part, all CMS required under relevant standards shall be subject to the provisions of this section upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Administrator.

(3) [Reserved]

(4) Additional monitoring requirements for control devices used to comply with provisions in relevant standards of this part are specified in § 63.11.

(b) *Conduct of monitoring.*

(1) Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator -

(i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures (see § 63.90(a) for definition); or

(ii) Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures (see § 63.90(a) for definition).

(iii) Owners or operators with flares subject to § 63.11(b) are not subject to the requirements of this section unless otherwise specified in the relevant standard.

(2) (i) When the emissions from two or more affected sources are combined before being released to the atmosphere, the owner or operator may install an applicable CMS for each emission stream or for the combined emissions streams, provided the monitoring is sufficient to demonstrate compliance with the relevant standard.

(ii) If the relevant standard is a mass emission standard and the emissions from one affected source are released to the atmosphere through more than one point, the owner or operator must install an applicable CMS at each emission point unless the installation of fewer systems is –

(A) Approved by the Administrator; or

(B) Provided for in a relevant standard (e.g., instead of requiring that a CMS be installed at each emission point before the effluents from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device).

(3) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the owner or operator shall report the results from the CMS used to meet the monitoring requirements of this part. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the owner or operator shall report the results from each CMS for the relevant compliance period.

(c) Operation and maintenance of continuous monitoring systems.

(1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.

(i) The owner or operator of an affected source must maintain and operate each CMS as specified in § 63.6(e)(1).

(ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

(iii) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan for CMS as specified in Sec. 63.6(e)(3).

(2) (i) All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).

(ii) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

(3) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under § 63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(4) Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows: **Only for CEMS. Requirements for CPMS are specified in referenced subparts G and SS of Part 63. Requirements for COMS do not apply because subpart FFFF does nor require continuous opacity monitoring systems (COMS).**

(i) **Subpart FFFF does not require COMS**

(ii) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(5) **Does not apply. Subpart FFFF does not contain opacity or VE limits.**

(6) The owner or operator of a CMS that is not a CPMS, which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity. The CPMS must be calibrated prior to use for the purposes of complying with this section. The CPMS must be checked daily for indication that the system is responding. If the CPMS system includes an internal system check, results must be recorded and checked daily for proper operation. **Only for CEMS. Requirements for CPMS are specified in referenced subparts G and SS of Part 63. Requirements for COMS do not apply because subpart FFFF does nor require continuous opacity monitoring systems (COMS).**

(7) **Only for CEMS. Requirements for CPMS are specified in referenced subparts G and SS of Part 63. Requirements for COMS do not apply because subpart FFFF does nor require continuous opacity monitoring systems (COMS).**

(i) A CMS is out of control if -

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or

(B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

(C) The COMS CD exceeds two times the limit in the applicable performance specification in the relevant standard.

(ii) When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

(8) The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in § 63.10(e)(3). **Only for CEMS. Requirements for CPMS are specified in referenced subparts G and SS of Part 63. Requirements for COMS do not apply because subpart FFFF does nor require continuous opacity monitoring systems (COMS).**

(d) *Quality control program*. **Applies only for CEMS**

(1) The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

(2) The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

(i) Initial and any subsequent calibration of the CMS;

(ii) Determination and adjustment of the calibration drift of the CMS;

(iii) Preventive maintenance of the CMS, including spare parts inventory;

(iv) Data recording, calculations, and reporting;

(v) Accuracy audit procedures, including sampling and analysis methods; and

(vi) Program of corrective action for a malfunctioning CMS.

(3) The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts.

(e) *Performance evaluation of continuous monitoring systems* – **Applies only for the alternative standard in Sec. 63.2505, but Sec.63.8(e)(5)(ii) does not apply because the alternative standard does not require COMS.**

(1) *General*. When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

(2) *Notification of performance evaluation*. The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under § 63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

(3) (i) *Submission of site-specific performance evaluation test plan*. Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iii) The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the

performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).

(iv) The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

(v) In the event that the Administrator fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified in § 63.7(c)(3), the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the monitoring method(s) specified in the relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this subpart using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance evaluation until the Administrator approves the use of the alternative method. If the Administrator does not approve the use of the alternative method within 30 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in paragraph (e)(4) of this section may be extended such that the owner or operator shall conduct the performance evaluation within 60 calendar days after the Administrator approves the use of the alternative method. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance evaluation as required in this section (without the Administrator's prior approval of the site-specific performance evaluation test plan) if he/she subsequently chooses to use the specified monitoring method(s) instead of an alternative.

(vi) Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator' failure to approve or disapprove a plan in a timely manner shall -

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) *Conduct of performance evaluation and performance evaluation dates*. The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under § 63.7 in accordance with the applicable performance specification as specified in the relevant standard. Notwithstanding the requirement in the previous sentence, if the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under § 63.6(h)(7), he/she shall conduct a performance evaluation of the COMS as specified in the relevant standard, before the performance test required under § 63.7 is conducted in time to submit the results of the performance evaluation as specified in paragraph (e)(5)(ii) of this section. If a performance test is not required, or the requirement for a performance test has been waived under § 63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in § 63.7(a), or as otherwise specified in the relevant standard.

(5) *Reporting performance evaluation results.*

(i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation simultaneously with the results of the performance test required under § 63.7 or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard. The Administrator may request that the owner or operator submit the raw data from a performance evaluation in the report of the performance evaluation results.

(ii) **[Reserved]**

(f) *Use of an alternative monitoring method -*

(1) *General*. Until permission to use an alternative monitoring procedure (minor, intermediate, or major changes; see definition in § 63.90(a)) has been granted by the Administrator under this paragraph (f)(1), the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard. **Applies except you may also request approval using the precompliance report.**

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following: **Applies except you may also request approval using the precompliance report.**

(i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;

(ii) Alternative monitoring requirements when the affected source is infrequently operated;

(iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;

(iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;

(v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;

(vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;

(vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;

(viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or

(ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.

(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail. **Applies except you may also request approval using the precompliance report.**

(4) **Applies except you may also request approval using the precompliance report.**

(i) *Request to use alternative monitoring procedure.* An owner or operator who wishes to use an alternative monitoring procedure must submit an application to the Administrator as described in paragraph (f)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring procedure is not the performance test method used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring procedure will serve as the performance test method that is to be used to demonstrate compliance with a relevant standard, the application must be submitted at least 60 days before the performance evaluation is scheduled to begin and must meet the requirements for an alternative test method under § 63.7(f).

(ii) The application must contain a description of the proposed alternative monitoring system which addresses the four elements contained in the definition of monitoring in § 63.2 and a performance evaluation test plan, if required, as specified in paragraph (e)(3) of this section. In addition, the application must include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (f)(4)(i) above to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

(iv) Application for minor changes to monitoring procedures, as specified in paragraph (b)(1) of this section, may be made in the site-specific performance evaluation plan.

(5) *Approval of request to use alternative monitoring procedure.* **Applies except you may also request approval using the precompliance report.**

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. If a request for a minor change is made in conjunction with site-specific performance evaluation plan, then approval of the plan will constitute approval of the minor change. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with --

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.

(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by § 63.8(f).

(6) Alternative to the relative accuracy test. An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows: **Only applicable when using CEMS to demonstrate compliance, including the alternative standard Sec.63.2505.**

(i) *Criteria for approval of alternative procedures.* An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in § 63.7, or other tests performed following the criteria in § 63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

(ii) *Petition to use alternative to relative accuracy test.* The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator’s determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

(iii) *Rescission of approval to use alternative to relative accuracy test*. The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

(g) *Reduction of monitoring data.* **Applies only for CEMS. Section 63.9(g)(2) does not apply because subpart FFFF does not require COMS.**

(1) The owner or operator of each CMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5) of this section.

(2) **[Reserved]**

(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant).

(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(5) **Do not apply. Requirements for CEMS are specified in Sec.63.2450(j). Requirements for CPMS are specified in referenced subparts G and SS of this part 63.**

§ 63.9 Notification requirements.

(a) *Applicability and general information*.

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(4) (i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in § 63.13).

(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of

the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

(b) *Initial notifications*.

(1) (i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.

(ii) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements of this section.

(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under § 63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph.

(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

(i) The name and address of the owner or operator;

(ii) The address (i.e., physical location) of the affected source;

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

(iv) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and

(v) A statement of whether the affected source is a major source or an area source.

(3) [Reserved]

(4) The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under § 63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in § 63.5(d)(1)(i); and

(ii) [Reserved]

(iii) [Reserved]

(iv) [Reserved]; and

(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(5) The owner or operator of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required under § 63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source, and

(ii) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(iii) Unless the owner or operator has requested and received prior permission from the Administrator to submit less than the information in § 63.5(d), the notification must include the information required on the application for approval of construction or reconstruction as specified in § 63.5(d)(1)(i).

(c) *Request for extension of compliance*. If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with § 63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in § 63.6(i)(4) through § 63.6(i)(6).

(d) *Notification that source is subject to special compliance requirements*. An owner or operator of a new source that is subject to special compliance requirements as specified in § 63.6(b)(3) and § 63.6(b)(4) shall notify the Administrator of his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.

(e) *Notification of performance test*. The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under § 63.7(c), if requested by the Administrator, and to have an observer present during the test.

(f) *Notification of opacity and visible emission observations*. **Subpart FFFF does not contain opacity or VE limits.**

(g) *Additional notification requirements for sources with continuous monitoring systems*. **Applies only for the alternative standard in Sec. 63.2505.** The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:

(1) A notification of the date the CMS performance evaluation under § 63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under § 63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under § 63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;

(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by § 63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by § 63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and

(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by § 63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked not later than 10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.

(h) *Notification of compliance status.* **Applies except subpart FFFF has no opacity or VE limits, and 63.9(h)(2)(i)(A) through G and (ii) do not apply because Sec. 63.2520(d) specifies the required contents and due date of the notification of compliance status report.**

(1) The requirements of paragraphs (h)(2) through (h)(4)of this section apply when an affected source becomes subject to a relevant standard.

(2) (i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list -

(A) The methods that were used to determine compliance;

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;

(E) If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);

(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

(ii) The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

(3) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

(4) [Reserved]

(5) If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in § 63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of § 63.5, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

(6) Advice on a notification of compliance status may be obtained from the Administrator.

(i) *Adjustment to time periods or postmark deadlines for submittal and review of required communications.*

(1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (i)(2) and (i)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

(j) *Change in information already provided*. **Does not apply. Sec.63.2520(e) specifies reporting requirements for process changes.**

§ 63.10 Recordkeeping and reporting requirements.

(a) *Applicability and general information*.

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(4) (i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in § 63.13).

(ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any reports at its discretion.

(5) If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in § 63.9(i).

(6) If an owner or operator supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in § 63.9(i).

(7) If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this provision are specified in § 63.9(i).

(b) *General recordkeeping requirements*.

(1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of -

(i)-(ii) **Do not apply. Sec. 63.998(d)(3) and Sec.63.998(c)(1)(ii)(D) through (G) specify recordkeeping requirements for periods of SSM.**

(iii) All required maintenance performed on the air pollution control and monitoring equipment;

(iv)-(v) **Do not apply. Sec. 63.998(d)(3) and Sec.63.998(c)(1)(ii)(D) through (G) specify recordkeeping requirements for periods of SSM.**

(vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods); **Applies only for CEMS; requirements for CPMS are specified in referenced subparts G and SS of this part 63.**

(vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a

CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this sections, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations; **Applies only for CEMS**

(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(x) All CMS calibration checks; **Applies only for CEMS; requirements for CPMS are specified in referenced subparts G and SS of this part 63.**

` (xi) All adjustments and maintenance performed on CMS; **Applies only for CEMS; requirements for CPMS are specified in referenced subparts G and SS of this part 63.**

(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;

(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under § 63.8(f)(6); and **Applies only for the alternative standard in Sec.63.2505**

(xiv) All documentation supporting initial notifications and notifications of compliance status under § 63.9.

(3) *Recordkeeping requirement for applicability determinations.* If an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f), and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under this part) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any. The requirements to determine applicability of a standard under § 63.1(b)(3) and to record the results of that determination under paragraph (b)(3) of this section shall not by themselves create an obligation for the owner or operator to obtain a title V permit.

(c) *Additional recordkeeping requirements for sources with continuous monitoring systems*. **Applies only for CEMS. Recordkeeping requirements for CPMS are specified in referenced subparts G and SS of this part 63.**

In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of -

(1) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

(2)–(4) [Reserved]

(5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

(6) The date and time identifying each period during which the CMS was out of control, as defined in § 63.8(c)(7);

(7)-(8) **Do not apply. Recordkeeping requirements are specified in Sec. 63.2525.**

(9) [Reserved]

(10) The nature and cause of any malfunction (if known);

(11) The corrective action taken or preventive measures adopted;

(12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

(13) The total process operating time during the reporting period; and

(14) All procedures that are part of a quality control program developed and implemented for CMS under § 63.8(d).

(15) In order to satisfy the requirements of paragraphs (c)(10) through (c)(12) of this section and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in § 63.6(e), provided that such plan and records adequately address the requirements of paragraphs (c)(10) through (c)(12).

(d) *General reporting requirements*.

(1) Not-withstanding the requirements in this paragraph or paragraph (e) of this section, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).

(2) *Reporting results of performance tests*. Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under § 63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under § 63.9(h).

(3) *Reporting results of opacity or visible emission observations.* **Does not apply. Subpart FFFF does not contain opacity or VE limits**

(4) *Progress reports*. The owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under § 63.6(i) shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(5) (i) **Does not apply. Sec. 63.2520(e)(4) and (5) specify the SSM reporting requirements.**

(ii) **[Reserved]**

(e) *Additional reporting requirements for sources with continuous monitoring systems* -

(1) *General.* When more than one CEMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CEMS.

(2) Reporting results of continuous monitoring system performance evaluations. **Applies only for the alternative standard, but Sec.63.10(e)(2)(ii) does not apply because the alternative standard does not require COMS.**

(i) The owner or operator of an affected source required to install a CMS by a relevant standard shall furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as required under § 63.8(e), simultaneously with the results of the performance test required under § 63.7, unless otherwise specified in the relevant standard. **Applies only for CEMS**

(ii) **Subpart FFFF does not require COMS**

(3) *Excess emissions and continuous monitoring system performance report and summary report.* **Does not apply. Reporting requirements are specified in Sec. 63.2520.**

(4) **Does not apply. Subpart FFFF does not contain opacity or VE limits.**

(f) *Waiver of recordkeeping or reporting requirements.*

(1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) If an application for a waiver of record-keeping or reporting is made, the application shall accompany the request for an extension of compliance under § 63.6(i), any required compliance progress report or compliance status report required under this part (such as under § 63.6(i) and § 63.9(h)) or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.

(4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she -

(i) Approves or denies an extension of compliance; or

(ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.

(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

§ 63.11 Control device requirements.

(a) *Applicability*. The applicability of this section is set out in Sec. 63.1(a)(4).

(b) Flares.

(1) Owners or operators using flares to comply with the provisions of this part shall

monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators using flares shall monitor these control devices.

(2) Flares shall be steam-assisted, air-assisted, or non-assisted.

(3) Flares shall be operated at all times when emissions may be vented to them.

(4) Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in appendix A of part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.

(5) Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(6) An owner/operator has the choice of adhering to the heat content specifications in paragraph (b)(6)(ii) of this section, and the maximum tip velocity specifications in paragraph (b)(7) or (b)(8) of this section, or adhering to the requirements in paragraph (b)(6)(i) of this section.

(i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume) or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity V_{max}, as determined by the following equation:

$$V_{max} = (X_{H2} - K_1) * K_2$$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9 (m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in § 63.14).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (b)(7)(i) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 MJ/scm (200 Btu/scf) or greater if the flare is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

K = Constant = 1.740×10^{-7} (1/ppmv)(g-mole/scm)(MJ/kcal); where the standard temperature for (g-mole/scm) is 20 °C.

C_i = Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946–77 or 90 (Reapproved 1994) (incorporated by reference as specified in § 63.14).

H_i = Net heat of combustion of sample component i, kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382–76 or 88 or D4809-95. (incorporated by reference as specified in § 63.14) if published values are not available or cannot be calculated.

n = Number of sample components.

(7) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(7)(ii) and (b)(7)(iii) of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60 of this chapter, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, less than the velocity V_{max}, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max}, for flares complying with this paragraph shall be determined by the following equation:

$$Log_{10}(V_{max})=(H_T+28.8)/31.7$$

Where:
V_{max} = Maximum permitted velocity, m/sec.
28.8 = Constant.
31.7 = Constant.
H_T = The net heating value as determined in paragraph (b)(6) of this section.

(8) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity V_{max}. The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation:

$$V_{max} = 8.71 + 0.708(H_T)$$

Where:
V_{max} = Maximum permitted velocity, m/sec.
8.71 = Constant.
0.708 = Constant.
H_T = The net heating value as determined in paragraph (b)(6)(ii) of this section.

§ 63.12 State authority and delegations.

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from -

(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;

(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or

(3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

(b) (1) Section 112(l) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards and other requirements pursuant to section 112 for stationary sources located in that State. Because of the unique nature of radioactive material, delegation of authority to implement and enforce standards that control radionuclides may require separate approval.

(2) Subpart E of this part establishes procedures consistent with section 112(l) for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. Subpart E also establishes procedures for the review and withdrawal of section 112 implementation and enforcement authorities granted through a section 112(l) approval.

(c) All information required to be submitted to the EPA under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain Federal or State reporting requirement. The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to the EPA and the State agency.

§ 63.13 Addresses of State air pollution control agencies and EPA Regional Offices.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated as follows:

EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Director; Air, Pesticides and Toxics Management Division; Atlanta Federal Center, 61 Forsyth Street; Atlanta, GA 30303-3104.

(b) All information required to be submitted to the Administrator under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act. The owner or operator of an affected source may contact the appropriate EPA Regional Office for the mailing addresses for those States whose delegation requests have been approved.

(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

§ 63.14 Incorporations by reference.

(a) The materials listed in this section are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of the approval, and notice of any change in these materials will be published in the Federal Register. The materials are available for purchase at the corresponding addresses noted below, and all are available for inspection at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC, at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M St., SW., Washington, DC, and at the EPA Library (MD-35), U.S. EPA, Research Triangle Park, North Carolina.

(b) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106.

(1) ASTM D523-89, Standard Test Method for Specular Gloss, IBR approved for § 63.782.

(2) ASTM D1193-77, 91, Standard Specification for Reagent Water, IBR approved for Appendix A: Method 306, Sections 7.1.1 and 7.4.2.

(3) ASTM D1331-89, Standard Test Methods for Surface and Interfacial Tension of Solutions of Surface Active Agents, IBR approved for Appendix A: Method 306B, Sections 6.2, 11.1, and 12.2.2.

(4) ASTM D1475-90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for § 63.788, Appendix A.

(5) ASTM D1946-77, 90, 94, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for § 63.11(b)(6).

(6) ASTM D2369-93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved for § 63.788, Appendix A.

(7) ASTM D2382-76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for § 63.11(b)(6).

(8) ASTM D2879-83, 96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for § 63.111 of Subpart G.

(9) ASTM D3257-93, Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography, IBR approved for § 63.786(b).

(10) ASTM 3695-88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography, IBR approved for § 63.365(e)(1) of Subpart O.

(11) ASTM D3792-91, Standard Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for § 63.788, Appendix A.

(12) ASTM D3912-80, Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(13) ASTM D4017-90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for § 63.788, Appendix A.

(14) ASTM D4082-89, Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(15) ASTM D4256-89, 94, Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(16) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for § 63.11(b)(6).

(17) ASTM E180-93, Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals, IBR approved for § 63.786(b).

(18) ASTM E260-91, 96, General Practice for Packed Column Gas Chromatography, IBR approved for §§ 63.750(b)(2) and 63.786(b)(5).

(19) Reserved

(20) Reserved

(21) ASTM D2099-00, Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Maeser Water Penetration Tester, IBR approved for § 63.5350.

(24) ASTM D2697-86(1998) (Reapproved 1998), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, IBR approved for §§63.4141(b)(1), 63.4741(b)(1), 63.4941(b)(1), and 63.5160(c).

(25) ASTM D6093-97, Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, IBR approved for §§63.4141(b)(1), 63.4741(b)(1), 63.4941(b)(1), and 63.5160(c).

(26) ASTM D1475-98, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, IBR approved for §§ 63.4141(b)(3) and 63.4141(c).

(27) ASTM D 6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide and Oxygen concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process heaters Using Portable Analyzers, IBR approved for Sec. 63.9307(c)(2).

(28) [Reserved]

(29) ASTM D6420-99, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for §§ 63.5799 and 63.5850.

(c) The materials listed below are available for purchase from the American Petroleum Institute (API), 1220 L Street, NW., Washington, DC 20005.

(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989, IBR approved for § 63.111 of subpart G of this part.

(2) API Publication 2518, Evaporative Loss from Fixed-roof Tanks, Second Edition, October 1991, IBR approved for § 63.150(g)(3)(i)(C) of subpart G of this part.

(3) API Manual of Petroleum Measurement Specifications (MPMS) Chapter 19.2, Evaporative Loss From Floating-Roof Tanks (formerly API Publications 2517 and 2519), First Edition, April 1997, IBR approved for § 63.1251 of subpart GGG of this part.

(d) *State and Local Requirements.* The materials listed below are available at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M St., SW., Washington, DC.

(1) *California Regulatory Requirements Applicable to the Air Toxics Program,* January 5, 1999, IBR approved for § 63.99(a)(5)(ii) of subpart E of this part.

(2) New Jersey's *Toxic Catastrophe Prevention Act Program*, (July 20, 1998), Incorporation By Reference approved for § 63.99 (a)(30)(i) of subpart E of this part.

(3) (i) Letter of June 7, 1999 to the U.S. Environmental Protection Agency Region 3 from the Delaware Department of Natural Resources and Environmental Control requesting formal full delegation to take over primary responsibility for implementation and enforcement of the Chemical Accident Prevention Program under Section 112(r) of the Clean Air Act Amendments of 1990.

(ii) Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management, Accidental Release Prevention Regulation, sections 1 through 5 and sections 7 through 14, effective January 11, 1999, IBR approved for § 63.99(a)(8)(i) of subpart E of this part.

(iii) State of Delaware Regulations Governing the Control of Air Pollution (October 2000), IBR approved for § 63.99(a)(8)(ii)-(v) of subpart E of this part.

(e) The materials listed below are available for purchase from the National Institute of Standards and Technology, Springfield, VA 22161, (800) 553-6847.

(1) Handbook 44, Specificiations, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998, IBR approved for § 63.1303(e)(3).

(2) [Reserved]

(f) The following material is available from the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P. O. Box 133318, Research Triangle Park, NC 27709-3318 or at http://www.ncasi.org: NCASI Method DI/MEOH-94.02, Methanol in Process Liquids GC/FID (Gas Chromatography/Flame Ionization Detection), August 1998, Methods Manual, NCASI, Research Triangle Park, NC, IBR approved for § 63.457(c)(3)(ii) of subpart S of this part.

(g) The materials listed below are available for purchase from AOAC International, Customer Services, Suite 400, 2200 Wilson Boulevard, Arlington, Virginia, 22201-3301, Telephone (703) 522-3032, Fax (703) 522-5468.

(1) AOAC Official Method 978.01 Phosphorus (Total) in Fertilizers, Automated Method, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(2) AOAC Official Method 969.02 Phosphorus (Total) in Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(3) AOAC Official Method 962.02 Phosphorus (Total) in Fertilizers, Gravimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(4) AOAC Official Method 957.02 Phosphorus (Total) in Fertilizers, Preparation of Sample Solution, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(5) AOAC Official Method 929.01 Sampling of Solid Fertilizers, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(6) AOAC Official Method 929.02 Preparation of Fertilizer Sample, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(7) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizers, Spectrophotometric Molybdovanadophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(h) The materials listed below are available for purchase from The Association of Florida Phosphate Chemists, P.O. Box 1645, Bartow, Florida, 33830, Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists, Seventh Edition 1991, IBR.

(1) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample, IBR approved for § 63.606(c)(3)(ii) and § 63.626(c)(3)(ii).

(2) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus -- P2O5 or Ca3(PO4)2, Method A-Volumetric Method, IBR approved for § 63.606(c)(3)(ii) and § 63.626(c)(3)(ii).

(3) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P2O5 or Ca3(PO4)2, Method B -- Gravimetric Quimociac Method, IBR approved for § 63.606(c)(3)(ii) and § 63.626(c)(3)(ii).

(4) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P2O5 or Ca3(PO4)2, Method C -- Spectrophotometric Method, IBR approved for § 63.606(c)(3)(ii) and § 63.626(c)(3)(ii).

(5) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method A -- Volumetric Method, IBR approved for § 63.606(c)(3)(ii), § 63.626(c)(3)(ii), and § 63.626(d)(3)(v).

(6) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method B -- Gravimetric Quimociac Method, IBR approved for § 63.606(c)(3)(ii), § 63.626(c)(3)(ii), and § 63.626(d)(3)(v).

(7) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method C -- Spectrophotometric Method, IBR approved for § 63.606(c)(3)(ii), § 63.626(c)(3)(ii), and § 63.626(d)(3)(v).

(i) The following materials are available for purchase from at least one of the following addresses: ASME International, Orders/Inquiries, P.O. Box 2900, Fairfield, NJ 07007-2900; or Global Engineering Documents, Sales Department, 15 Inverness Way East,
Englewood, CO 80112.

(1) ASME standard number QHO-1-1994, ``Standard for the Qualification and Certification of Hazardous Waste Incinerator Operators," IBR approved for Sec. 63.1206(c)(6)(iii).

(2) ASME standard number QHO-1a-1996 Addenda to QHO-1-1994, ``Standard for the Qualification and Certification of Hazardous Waste Incinerator Operators," IBR approved for Sec. 63.1206(c)(6)(iii).

(3) ANSI/ASME PTC 19.10-1981, ``Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]," IBR approved for Sec. Sec. 63.865(b), 63.3360(e)(1)(iii), 63.4166(a)(3), 63.4362(a)(3), 63.4766(a)(3), 63.4965(a)(3), 63.5160(d)(1)(iii), 63.9307(c)(2), and 63.9323(a)(3).

(j) [Reserved]

(k) The following material may be obtained from U.S. EPA, Office of Solid Waste (5305W), 1200 Pennsylvania Avenue, NW., Washington, DC 20460:

(1) Method 9071B, ``n-Hexane Extractable Material(HEM) for Sludge, Sediment, and Solid Samples," (Revision 2, April 1998) as published in EPA Publication SW-846: ``Test Methods for

Evaluating Solid Waste, Physical/Chemical Methods." The incorporation by reference of Method 9071B is approved for Section 63.7824(e) of Subpart FFFFF of this part.

§ 63.15 Availability of information and confidentiality.

(a) *Availability of information*.

(1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.

(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) *Confidentiality.*

(1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.

(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

Appendix G: 40 CFR 63 Subpart ZZZZ

Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

What This Subpart Covers

§ 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

§ 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE with a site-rating of more than 500 brake horsepower located at a major source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.* A stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002. A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* A stationary RICE is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(3) *Reconstructed stationary RICE.* A stationary RICE is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraph (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(d).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE; or

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE.

(2) A new or reconstructed stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements

of §63.6645(d) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) A stationary RICE which is an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, an existing compression ignition (CI) stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

§ 63.6595 When do I have to comply with this subpart?

(a) *Affected sources.* (1) If you have an existing stationary RICE, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007.

(2) If you start up your new or reconstructed stationary RICE before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with this subpart within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

Emission and Operating Limitations

§ 63.6600 What emission limitations and operating limitations must I meet?

(a) If you own or operate an existing, new, or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a of this subpart and the operating limitations in Table 1b of this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB or 4SLB stationary RICE or a new or reconstructed CI stationary RICE located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a of this subpart and the operating limitations in Table 2b of this subpart which apply to you.

(c) If you own or operate: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, or an existing CI stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE, you do not need to comply with the emission limitations in Tables 1a and 2a of this subpart or operating limitations in Tables 1b and 2b of this subpart.

General Compliance Requirements

§ 63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times, except during periods of startup, shutdown, and malfunction.

(b) If you must comply with emission limitations and operating limitations, you must operate and maintain your stationary RICE, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

Testing and Initial Compliance Requirements

§ 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations?

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 of this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

§ 63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§ 63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions that this subpart specifies in Table 4. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$$

Where:

C_i= concentration of CO or formaldehyde at the control device inlet,

C_o= concentration of CO or formaldehyde at the control device outlet, and

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2concentration is measured in lieu of oxygen concentration measurement, a CO_2correction factor is needed. Calculate the CO_2correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific $F_o$value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209\, F_d}{F_c} \qquad \text{(Eq. 2)}$$

Where:

F_o= Fuel factor based on the ratio of oxygen volume to the ultimate CO_2volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

F_c= Ratio of the volume of CO_2produced to the gross calorific value of the fuel from Method 19, dsm^3 /J (dscf/10^6 Btu).

(ii) Calculate the CO_2correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{co_2} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$$

Where:

X_{co2}= CO_2correction factor, percent.

5.9 = 20.9 percent O_2−15 percent O_2, the defined O_2correction value, percent.

(iii) Calculate the $NO_X$and SO_2gas concentrations adjusted to 15 percent O_2using CO_2as follows:

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \qquad \text{(Eq. 4)}$$

Where:

$\%CO_2$= Measured CO_2concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

§ 63.6625 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO_2at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in §63.8.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In

addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

§ 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

Continuous Compliance Requirements

§ 63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

§ 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b and Tables 2a and 2b of this subpart that apply to you according to methods specified in Table 6 of this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b and Tables 2a and 2b of this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) [Reserved]

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations.

Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR §94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 of this subpart that apply to you. If you own or operate an existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing emergency stationary RICE, an existing limited use emergency stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you do not need to comply with the requirements in Table 8 of this subpart. If you own or operate a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE, you do not need to comply with the requirements in Table 8 of this subpart, except for the initial notification requirements.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006]

Notifications, Reports, and Records

§ 63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE).

(e) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(f) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 of this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 of this subpart that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

§ 63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) The first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

§ 63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(3), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

§ 63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off-site for the remaining 3 years.

Other Requirements and Information

§ 63.6665 What parts of the General Provisions apply to me?

Table 8 of this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate an existing 2SLB, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE, you do not need to comply with any of the requirements of the General Provisions. If you own or operate a new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE, you do not need to comply with the requirements in the General Provisions except for the initial notification requirements.

§ 63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§ 63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Public Law 101–549, 104 Stat. 2399).

Compression ignition engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition, including diesel engines, dual-fuel engines, and engines that are not spark ignition.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary RICE that operates in an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE may also operate an additional 50 hours per year in non-emergency situations.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. May be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.,* remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production

equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_X(such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition engine means a type of engine in which a compressed air/fuel mixture is ignited by a timed electric spark generated by a spark plug.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as

defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006]

Table1ato Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

[As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE at 100 percent load plus or minus 10 percent]

For each . . .	You must meet *one* of the following emission limitations . . .
1. 4SRB RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007, or b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2.

Table1bto Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE

[As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE]

For each . . .	You must meet the following emission limitation . . .
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than two inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and

$O_2$and using NSCR	b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent if applicable) and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent $O_2$and not using NSCR	Comply with any operating limitations approved by the Administrator.

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

[As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent]

For each . . .	You must meet the following emission limitation . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2until June 15, 2007.
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2.
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2.

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed Lean Burn and Compression Ignition Stationary RICE

[As stated in §§63.6600, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE]

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than two inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F

	and less than or equal to 1350 °F.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst	Comply with any operating limitations approved by the Administrator.

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

[As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements]

For each . . .	Complying with the requirement to . . .	You must . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE with a brake horsepower ≥5,000	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE (all stationary RICE subcategories and all brake horsepower ratings)	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]

[1]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

[As stated in §§63.6610, 63.6620, and 63.6640, you must comply with the following requirements for performance tests]

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions	i. Measure the O_2at the inlet and outlet of the control device; and	(1) Portable CO and O_2analyzer	(a) Using ASTM D6522–00[1](incorporated by reference, see §63.14). Measurements to determine O_2must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control	(1) Portable CO and O_2analyzer	(a) Using ASTM D6522–00[1](incorporated by reference, see §63.14).

		device		The CO concentration must be at 15 percent O_2, dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions	i. Select sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60 appendix A §63.7(d)(1)(i)	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A	(a) Measurements to determine O_2concentration must be made at the same time as the measurements for formaldehyde concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03[2], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i)	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A	(a) Measurements to determine O_2concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		iii. Measure	(1) Method 4 of 40 CFR	(a) Measurements to

		moisture content of the stationary RICE exhaust at the sampling port location; and	part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03	determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348–03[2], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[1]You may also use Methods 3A and 10 as options to ASTM-D6522-00. You may obtain a copy of ASTM-D6522-00 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohochen, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[2]You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohochen, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations and Operating Limitations

[As stated in §§63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following]

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. the average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and

		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
3. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2or CO_2at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
4. 4SRB stationary RICE	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
5. 4SRB stationary RICE	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
6. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements

		in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.

Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations and Operating Limitations

[As stated in §63.6640, you must continuously comply with the emissions and operating limitations as required by the following]

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[1]; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved[1]; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages;

		and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and
		ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. 4SRB stationary RICE	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. 4SRB stationary RICE	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		ii. reducing these data to 4-hour rolling averages;
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. 4SRB stationary RICE with a brake horsepower ≥5,000	Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved[1].
7. Stationary RICE	Limit the concentration of formaldehyde in the stationary RICE exhaust and using	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration

	oxidation catalyst or NSCR	limit[1]; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. Stationary RICE	Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[1]; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

[1]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

[As stated in §63.6650, you must comply with the following requirements for reports]

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during	i. Semiannually according to the requirements in §63.6650(b).

	which the CMS was out-of-control during the reporting period; or	
	b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
	c. If you had a startup, shutdown or malfunction during the reporting period, the information in §63.10(d)(5)(i)	i. Semiannually according to the requirements in §63.6650(b).
2. An immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with your startup, shutdown, or malfunction plan during the reporting period	a. Actions taken for the event; and	i. By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. The information in §63.10(d)(5)(ii).	i. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authorities. (§63.10(d)(5)(ii))
3. Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650.
	b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 3.a.i.
	c. Any problems or errors suspected with the meters	i. See item 3.a.i.

Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ

[As stated in §63.6665, you must comply with the following applicable general provisions]

General provisions citation	Subject of citation	Applies to subpart	Explanation

§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)–(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)–(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)(1)	Operation and maintenance	Yes.	
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, shutdown, and malfunction plan	Yes.	
§63.6(f)(1)	Applicability of standards except during startup shutdown malfunction (SSM)	Yes.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures	Yes.	

	and criteria		
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §63.6610.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes.	
§63.7(b)(2)	Notification of rescheduling	Yes.	
§63.7(c)	Quality assurance/test plan	Yes.	
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	Yes.	
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	Yes.	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown	Yes.	

	Malfunction Plan		
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	Yes.	
§63.8(c)(2)–(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
§63.8(f)(1)–(5)	Alternative monitoring method	Yes.	
§63.8(f)(6)	Alternative to relative accuracy test	Yes.	
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)–(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
§63.9(c)	Request for compliance extension	Yes.	
§63.9(d)	Notification of special compliance requirements for new sources	Yes.	
§63.9(e)	Notification of performance test	Yes.	
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes.	
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
§63.9(h)(1)–(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after

			completion of performance evaluations. §63.9(h)(4) is reserved.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for record- keeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes.	
§63.10(b)(2)(i)–(v)	Records related to SSM	Yes.	
§63.10(b)(2)(vi)–(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)–(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	Yes.	
§63.10(e)(1) and (2)(i)	Additional CMS reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes	Except that §63.10(e)(3)(i)(C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	

§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

Appendix H: ADM Consent Decree

Negotiated under United States v. ADM (C.D. IL, No. 03-CV-2066)

A copy of this Consent Decree may be obtained on the internet at following address:
http://www.epa.gov/compliance/resources/decrees/civil/caa/admcd.pdf

Appendix I: Agency O & M Plans

ADM Cedar Rapids Plant-Wide Packed Bed/General Wet Scrubber Agency Operation & Maintenance Plan

Monitoring Guidelines

ADM makes a commitment to take timely corrective action during periods of excursions where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with Applicable Requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Applicable Emission Points

Emission Point ID #	Control Equip ID #	Description
002	CE-2A	Multivane Scrubber
	CE-2B	Multivane Scrubber
005	CE-43	Ducon Multivane Scrubber
	CE-5A	Packed Tower Scrubber
	CE-5B	Packed Tower Scrubber
	CE-5C	Dryer #4 Ducon Scrubber
	CE-5D	Dryer #5 Ducon Scrubber
	CE-18	Ducon Multivane Scrubber
025	CE-25	Entoleter Scrubber Stack
	CE-19	Ducon Multivane Scrubber
	CE-30	Ducon Multivane Scrubber
015	CE-15C	Entoleter Scrubber
016	CE-16E	Aerosorb Horizontal Cross Flow Scrubber
055	CE-55	Scrubber

Monitoring Methods & Corrective Actions

General

- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.
- If flow rates or pressure drop levels are occurring outside the normal operating range, investigative/corrective action will start within 8 hours of findings.

Weekly

- Check and document the scrubbing liquid circulating and make-up flow as appropriate and pressure drop across the scrubber. If the flow or pressure drop falls out of the recent normal operating range, based upon observed averages and ranges over the past year of operations (or outside a specific permit limit range), corrective action will be started within eight (8) hours of findings to return the operations to normal. The recent normal operating range shall also be documented on each record used for documenting the readings. Changes to these operating ranges shall be documented to include the reason and justification for the change. Conduct observations of the stack and areas adjacent to the stack to determine if excess droplet re-entrainment is occurring from an improperly operating mist eliminator. The signs of droplet re-entrainment may include fallout of solid-containing droplets, discoloration of the stack and adjacent surfaces, or a mud lip around the stack. If excess droplet re-entrainment is occurring, the appropriate measures for remediation will be started with eight (8) hours of findings.
- Maintain a written or electronic record of the inspection and any action resulting from the inspection.

Quarterly

- Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be started within eight (8) hours of findings.
- Maintain a written or electronic record of the inspection and any action resulting from the inspection.

Annually (contingent on accessibility during shutdown period)

- Conduct an internal inspection of the scrubber to search as appropriate for signs of erosion, corrosion, or solids deposits, solids accumulation in mist eliminators, and plugged or eroded spray nozzles. If any of these conditions exist the appropriate measures for remediation will be started within eight (8) hours of findings.
- Maintain a written or electronic record of the inspection and any action resulting from the inspection.

Record Keeping

- Maintain a written or electronic record of all inspections and any action resulting from the inspections.
- The facility will keep maintenance and inspection records for five (5) years and will be available upon request.

Quality Control

- The equipment will be operated and maintained according to typical food industry standards and/or as outlined in the above monitoring requirements.

ADM Cedar Rapids Plant-Wide Dust Collector Agency Operation & Maintenance Plan

Monitoring Guidelines

ADM makes a commitment to take timely corrective action during periods of excursions where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with the Applicable Requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Applicable Emission Points

Emission Point ID #	Control Equip ID #	Description
061	CE-61	Bin Vent Filter
062	CE-62	Bin Vent Filter
063	CE-63	Bin Vent Filter
064	CE-64	Bin Vent Filter
086	CE-86	Gluten Truck and Rail Loading Baghouse
501	CE-501A	Cogen Boiler #1 Baghouse
	CE-501B	Cogen Boiler #2 Baghouse
502	CE-502A	Cogen Boiler #3 Baghouse
	CE-502B	Cogen Boiler #4 Baghouse
504	CE-504	Crusher Building D.C. System Baghouse
505	CE-505	Limestone Unloading Baghouse
530	CE-530A	Cogen Boiler #5 Baghouse

Monitoring Methods & Corrective Actions

General
Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Daily – Required for EP 86 60% Gluten Truck and Rail Loading

- The facility shall remove product deposits from the ground and building structures on a daily basis. This can be accomplished with sweeping, washing, or other methods that adequately remove the product deposits generated from this emission unit.

Weekly

- The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (greater than the permit limit) is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

  Continuous opacity monitors shall be used in place of weekly visible emissions checks for the baghouses used to control particulate emissions from the coal boilers.

- Check and document the Dust Collector pressure drop. If the pressure drop is outside of the recent normal operating range (or below a specific permit limit), investigative/corrective action will start within 8 hours of findings to return the pressure drop to normal or identify the reason for the drop.

- Maintain a written or electronic record of the observations and any action resulting from the inspection.

Monthly

- Check the hopper functions and performance.
- Conduct a walk-around inspection of the Dust Collector system to search for leaks. If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours of findings.
- Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly

- Check the air delivery system for appropriate line pressure.

- Check the operation, sequencing, and pulse duration of the cleaning cycle.

If abnormal conditions are detected which would affect emissions to the atmosphere, the appropriate corrective measures will be initiated within eight (8) hours of findings. Other identified issues will be scheduled for future repair.

- Maintain a written record of the inspection and any action resulting from the inspection.

Record Keeping and Reporting

- Maintain a written or electronic record of all inspections and any action resulting from the inspections.
- The facility will keep maintenance and inspection records for five (5) years and will be available upon request.

Quality Control

- The equipment will be operated and maintained according to typical food industry standards and/or as outlined in the above monitoring requirements.
- An adequate inventory of spare parts shall be kept.

Appendix J: 40 CFR 60 Subpart D

Subpart D—Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971

Source: 72 FR 32717, June 13, 2007, unless otherwise noted.

§ 60.40 Applicability and designation of affected facility.

(a) The affected facilities to which the provisions of this subpart apply are:

(1) Each fossil-fuel-fired steam generating unit of more than 73 megawatts (MW) heat input rate (250 million British thermal units per hour (MMBtu/hr)).

(2) Each fossil-fuel and wood-residue-fired steam generating unit capable of firing fossil fuel at a heat input rate of more than 73 MW (250 MMBtu/hr).

(b) Any change to an existing fossil-fuel-fired steam generating unit to accommodate the use of combustible materials, other than fossil fuels as defined in this subpart, shall not bring that unit under the applicability of this subpart.

(c) Except as provided in paragraph (d) of this section, any facility under paragraph (a) of this section that commenced construction or modification after August 17, 1971, is subject to the requirements of this subpart.

(d) The requirements of §§60.44 (a)(4), (a)(5), (b) and (d), and 60.45(f)(4)(vi) are applicable to lignite-fired steam generating units that commenced construction or modification after December 22, 1976.

(e) Any facility covered under subpart Da is not covered under this subpart.

§ 60.41 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, and in subpart A of this part.

Boiler operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the steam-generating unit. It is not necessary for fuel to be combusted the entire 24-hour period.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference, see §60.17).

Coal refuse means waste-products of coal mining, cleaning, and coal preparation operations (e.g. culm, gob, etc.) containing coal, matrix material, clay, and other organic and inorganic material.

Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.

Fossil fuel and wood residue-fired steam generating unit means a furnace or boiler used in the process of burning fossil fuel and wood residue for the purpose of producing steam by heat transfer.

Fossil-fuel-fired steam generating unit means a furnace or boiler used in the process of burning fossil fuel for the purpose of producing steam by heat transfer.

Wood residue means bark, sawdust, slabs, chips, shavings, mill trim, and other wood products derived from wood processing and forest management operations.

§ 60.42 Standard for particulate matter (PM).

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases that:

(1) Contain PM in excess of 43 nanograms per joule (ng/J) heat input (0.10 lb/MMBtu) derived from fossil fuel or fossil fuel and wood residue.

(2) Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.

(b)(1) On or after December 28, 1979, no owner or operator shall cause to be discharged into the atmosphere from the Southwestern Public Service Company's Harrington Station #1, in Amarillo, TX, any gases which exhibit greater than 35 percent opacity, except that a maximum or 42 percent opacity shall be permitted for not more than 6 minutes in any hour.

(2) Interstate Power Company shall not cause to be discharged into the atmosphere from its Lansing Station Unit No. 4 in Lansing, IA, any gases which exhibit greater than 32 percent opacity, except that a maximum of 39 percent opacity shall be permitted for not more than six minutes in any hour.

§ 60.43 Standard for sulfur dioxide (SO_2).

(a) Except as provided under paragraph (d) of this section, on and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases that contain SO_2in excess of:

(1) 340 ng/J heat input (0.80 lb/MMBtu) derived from liquid fossil fuel or liquid fossil fuel and wood residue.

(2) 520 ng/J heat input (1.2 lb/MMBtu) derived from solid fossil fuel or solid fossil fuel and wood residue, except as provided in paragraph (e) of this section.

(b) Except as provided under paragraph (d) of this section, when different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$$PS_{SO_2} = \frac{y\,(340) + z\,(520)}{(y + z)}$$

Where:

$PS_{SO}2$= Prorated standard for $S_{O2}$when burning different fuels simultaneously, in ng/J heat input derived from all fossil fuels or from all fossil fuels and wood residue fired;

y = Percentage of total heat input derived from liquid fossil fuel; and

z = Percentage of total heat input derived from solid fossil fuel.

(c) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.

(d) As an alternate to meeting the requirements of paragraphs (a) and (b) of this section, an owner or operator can petition the Administrator (in writing) to comply with §60.43Da(i)(3) of subpart Da of this part or comply with §60.42b(k) of subpart Db of this part, as applicable to the affected source. If the Administrator grants the petition, the source will from then on (unless the unit is modified or

reconstructed in the future) have to comply with the requirements in §60.43Da(i)(3) of subpart Da of this part or §60.42b(k) of subpart Db of this part, as applicable to the affected source.

(e) Units 1 and 2 (as defined in appendix G of this part) at the Newton Power Station owned or operated by the Central Illinois Public Service Company will be in compliance with paragraph (a)(2) of this section if Unit 1 and Unit 2 individually comply with paragraph (a)(2) of this section or if the combined emission rate from Units 1 and 2 does not exceed 470 ng/J (1.1 lb/MMBtu) combined heat input to Units 1 and 2.

§ 60.44 Standard for nitrogen oxides (NOX).

(a) Except as provided under paragraph (e) of this section, on and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases that contain NO_X, expressed as NO_2in excess of:

(1) 86 ng/J heat input (0.20 lb/MMBtu) derived from gaseous fossil fuel.

(2) 129 ng/J heat input (0.30 lb/MMBtu) derived from liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue.

(3) 300 ng/J heat input (0.70 lb/MMBtu) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse).

(4) 260 ng/J heat input (0.60 lb MMBtu) derived from lignite or lignite and wood residue (except as provided under paragraph (a)(5) of this section).

(5) 340 ng/J heat input (0.80 lb MMBtu) derived from lignite which is mined in North Dakota, South Dakota, or Montana and which is burned in a cyclone-fired unit.

(b) Except as provided under paragraphs (c), (d), and (e) of this section, when different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

$$PS_{NO_x} = \frac{w\,(260) + x\,(86) + y\,(130) + z\,(300)}{(w + x + y + z)}$$

Where:

PS_{NOX}= Prorated standard for $NO_X$when burning different fuels simultaneously, in ng/J heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

w = Percentage of total heat input derived from lignite;

x = Percentage of total heat input derived from gaseous fossil fuel;

y = Percentage of total heat input derived from liquid fossil fuel; and

z = Percentage of total heat input derived from solid fossil fuel (except lignite).

(c) When a fossil fuel containing at least 25 percent, by weight, of coal refuse is burned in combination with gaseous, liquid, or other solid fossil fuel or wood residue, the standard for NO_Xdoes not apply.

(d) Except as provided under paragraph (e) of this section, cyclone-fired units which burn fuels containing at least 25 percent of lignite that is mined in North Dakota, South Dakota, or Montana remain subject to paragraph (a)(5) of this section regardless of the types of fuel combusted in combination with that lignite.

(e) As an alternate to meeting the requirements of paragraphs (a), (b), and (d) of this section, an owner or operator can petition the Administrator (in writing) to comply with §60.44Da(e)(3) of subpart Da of this part. If the Administrator grants the petition, the source will from then on (unless the unit is modified or reconstructed in the future) have to comply with the requirements in §60.44Da(e)(3) of subpart Da of this part.

§ 60.45 Emissions and fuel monitoring.

(a) Each owner or operator shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for measuring the opacity of emissions, SO_2emissions, NO_Xemissions, and either oxygen (O_2) or carbon dioxide (CO_2) except as provided in paragraph (b) of this section.

(b) Certain of the CEMS requirements under paragraph (a) of this section do not apply to owners or operators under the following conditions:

(1) For a fossil-fuel-fired steam generator that burns only gaseous fossil fuel and that does not use post-combustion technology to reduce emissions of SO_2or PM, CEMS for measuring the opacity of emissions and SO_2emissions are not required.

(2) For a fossil-fuel-fired steam generator that does not use a flue gas desulfurization device, a CEMS for measuring SO_2emissions is not required if the owner or operator monitors SO_2emissions by fuel sampling and analysis.

(3) Notwithstanding §60.13(b), installation of a CEMS for NO_Xmay be delayed until after the initial performance tests under §60.8 have been conducted. If the owner or operator demonstrates during the performance test that emissions of $NO_X$are less than 70 percent of the applicable standards in §60.44, a CEMS for measuring NO_Xemissions is not required. If the initial performance test results show that NO_Xemissions are greater than 70 percent of the applicable standard, the owner or operator shall install a CEMS for NO_Xwithin one year after the date of the initial performance tests under §60.8 and comply with all other applicable monitoring requirements under this part.

(4) If an owner or operator does not install any CEMS for sulfur oxides and NO_X, as provided under paragraphs (b)(1) and (b)(3) or paragraphs (b)(2) and (b)(3) of this section a CEMS for measuring either O_2or $CO_2$is not required.

(5) An owner or operator may petition the Administrator (in writing) to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.

(6) A CEMS for measuring the opacity of emissions is not required for a fossil fuel-fired steam generator that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected source are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis. Owners and operators of affected sources electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (b)(6)(i) through (iv) of this section.

(i) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (b)(6)(i)(A) through (D) of this section.

(A) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(B) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(C) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. At least two data points per hour must be used to calculate each 1-hour average.

(D) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(ii) You must calculate the 1-hour average CO emissions levels for each boiler operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each boiler operating day.

(iii) You must evaluate the preceding 24-hour average CO emission level each boiler operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(iv) You must record the CO measurements and calculations performed according to paragraph (b)(6) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(c) For performance evaluations under §60.13(c) and calibration checks under §60.13(d), the following procedures shall be used:

(1) Methods 6, 7, and 3B of appendix A of this part, as applicable, shall be used for the performance evaluations of $SO_2$and NO_Xcontinuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B of appendix A of this part are given in §60.46(d).

(2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of appendix B to this part.

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent. For a continuous monitoring system measuring sulfur oxides or $NO_X$the span value shall be determined using one of the following procedures:

(i) Except as provided under paragraph (c)(3)(ii) of this section, $SO_2$and NO_Xspan values shall be determined as follows:

Fossil fuel	In parts per million	
	Span value for SO_2	**Span value for NO_X**
Gas	([1])	500.
Liquid	1,000	500.
Solid	1,500	1,000.
Combinations	1,000y + 1,500z	500 (x + y) + 1,000z.

[1]Not applicable.

Where:

x = Fraction of total heat input derived from gaseous fossil fuel;

y = Fraction of total heat input derived from liquid fossil fuel; and

z = Fraction of total heat input derived from solid fossil fuel.

(ii) As an alternative to meeting the requirements of paragraph (c)(3)(i) of this section, the owner or operator of an affected facility may elect to use the $SO_2$and NO_Xspan values determined according to sections 2.1.1 and 2.1.2 in appendix A to part 75 of this chapter.

(4) All span values computed under paragraph (c)(3)(i) of this section for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm. Span values that are computed under paragraph (c)(3)(ii) of this section shall be rounded off according to the applicable procedures in section 2 of appendix A to part 75 of this chapter.

(5) For a fossil-fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all CEMS shall be subject to the Administrator's approval.

(d) [Reserved]

(e) For any CEMS installed under paragraph (a) of this section, the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/MMBtu):

(1) When a CEMS for measuring $O_2$is selected, the measurement of the pollutant concentration and O_2concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E = CF\left(\frac{20.9}{(20.9 - \%O_2)}\right)$$

Where E, C, F, and $\%O_2$are determined under paragraph (f) of this section.

(2) When a CEMS for measuring $CO_2$is selected, the measurement of the pollutant concentration and CO_2concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure shall be used:

$$E = CF_c\left(\frac{100}{\%CO_2}\right)$$

Where E, C, $F_c$and $\%CO_2$are determined under paragraph (f) of this section.

(f) The values used in the equations under paragraphs (e)(1) and (2) of this section are derived as follows:

(1) E = pollutant emissions, ng/J (lb/MMBtu).

(2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9}M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for $SO_2$and 46.01 for NO_X.

(3) $\%O_2$, $\%CO_2$= O_2or CO_2volume (expressed as percent), determined with equipment specified under paragraph (a) of this section.

(4) F, F_c= a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of CO_2generated to the calorific value of the fuel combusted (F_c), respectively. Values of F and $F_c$are given as follows:

(i) For anthracite coal as classified according to ASTM D388 (incorporated by reference, see §60.17), F = 2,723 × 10^{-17}dscm/J (10,140 dscf/MMBtu) and F_c= 0.532 × 10^{-17}scm CO_2/J (1,980 scf CO_2/MMBtu).

(ii) For subbituminous and bituminous coal as classified according to ASTM D388 (incorporated by reference, see §60.17), F = 2.637 × 10^{-7}dscm/J (9,820 dscf/MMBtu) and F_c= 0.486 × 10^{-7}scm CO_2/J (1,810 scf CO_2/MMBtu).

(iii) For liquid fossil fuels including crude, residual, and distillate oils, F = 2.476 × 10^{-7}dscm/J (9,220 dscf/MMBtu) and F_c= 0.384 × 10^{-7}scm CO_2/J (1,430 scf CO_2/MMBtu).

(iv) For gaseous fossil fuels, F = 2.347 × 10^{-7}dscm/J (8,740 dscf/MMBtu). For natural gas, propane, and butane fuels, F_c= 0.279 × 10^{-7}scm CO_2/J (1,040 scf CO_2/MMBtu) for natural gas, 0.322 × 10^{-7}scm CO_2/J (1,200 scf CO_2/MMBtu) for propane, and 0.338 × 10^{-7}scm CO_2/J (1,260 scf CO_2/MMBtu) for butane.

(v) For bark F = 2.589 × 10^{-7}dscm/J (9,640 dscf/MMBtu) and F_c= 0.500 × 10^{-7}scm CO_2/J (1,840 scf CO_2/MMBtu). For wood residue other than bark F = 2.492 × 10^{-7}dscm/J (9,280 dscf/MMBtu) and F_c= 0.494 × 10^{-7}scm CO_2/J (1,860 scf CO_2/MMBtu).

(vi) For lignite coal as classified according to ASTM D388 (incorporated by reference, see §60.17), F = 2.659 × 10^{-7}dscm/J (9,900 dscf/MMBtu) and F_c= 0.516 × 10^{-7}scm CO_2/J (1,920 scf CO_2/MMBtu).

(5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/MMBtu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or Fc factor (scm CO_2/J, or scf CO_2/MMBtu) on either basis in lieu of the F or $F_c$factors specified in paragraph (f)(4) of this section:

$$F = 10^{-6}\,\frac{[227.2\,(\%H) + 95.5\,(\%C) + 35.6\,(\%S) + 8.7\,(\%N) - 28.7\,(\%O)]}{GCV}$$

$$F_c = \frac{2.0 \times 10^{-5}(\%C)}{GCV\ (SI\ units)}$$

$$F = 10^{-6}\,\frac{[3.64\,(\%H) + 1.53\,(\%C) + 0.57\,(\%S) + 0.14\,(\%N) - 0.46\,(\%O)]}{GCV\ (English\ units)}$$

$$F_c = \frac{20.0\,(\%C)}{GCV\ (SI\ units)}$$

$$F_c = \frac{321 \times 10^{3}\,(\%C)}{GCV\ (English\ units)}$$

(i) %H, %C, %S, %N, and %O are content by weight of hydrogen, carbon, sulfur, nitrogen, and O_2(expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM D3178 or D3176 (solid fuels), or computed from results using ASTM D1137,

D1945, or D1946 (gaseous fuels) as applicable. (These five methods are incorporated by reference, see §60.17.)

(ii) GVC is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015 or D5865 for solid fuels and D1826 for gaseous fuels as applicable. (These three methods are incorporated by reference, see §60.17.)

(iii) For affected facilities which fire both fossil fuels and nonfossil fuels, the F or Fc value shall be subject to the Administrator's approval.

(6) For affected facilities firing combinations of fossil fuels or fossil fuels and wood residue, the F or Fc factors determined by paragraphs (f)(4) or (f)(5) of this section shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^{n} X_i F_i \quad \text{or} \quad F_c = \sum_{i=1}^{n} X_i (F_c)_i$$

Where:

X_i= Fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, wood residue, etc.);

$F_i$or $(F_c)_i$= Applicable F or $F_c$factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section; and

n = Number of fuels being burned in combination.

(g) Excess emission and monitoring system performance reports shall be submitted to the Administrator semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in §60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

(1) *Opacity* . Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.

(i) For sources subject to the opacity standard of §60.42(b)(1), excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 35 percent opacity, except that one six-minute average per hour of up to 42 percent opacity need not be reported.

(ii) For sources subject to the opacity standard of §60.42(b)(2), excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 32 percent opacity, except that one six-minute average per hour of up to 39 percent opacity need not be reported.

(2) *Sulfur dioxide* . Excess emissions for affected facilities are defined as:

(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of SO_2as measured by a CEMS exceed the applicable standard under §60.43, or

(ii) Any 30 operating day period during which the average emissions (arithmetic average of all one-hour periods during the 30 operating days) of SO_2as measured by a CEMS exceed the applicable standard under §60.43. Facilities complying with the 30-day SO_2standard shall use the most current associated SO_2compliance and monitoring requirements in §§60.48Da and 60.49Da of subpart Da of this part.

(3) *Nitrogen oxides* . Excess emissions for affected facilities using a CEMS for measuring $NO_X$are defined as:

(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under §60.44, or

(ii) Any 30 operating day period during which the average emissions (arithmetic average of all one-hour periods during the 30 operating days) of NO_Xas measured by a CEMS exceed the applicable standard under §60.43. Facilities complying with the 30-day NO_Xstandard shall use the most current associated NO_Xcompliance and monitoring requirements in §§60.48Da and 60.49Da of subpart Da of this part.

(4) *Particulate matter* . Excess emissions for affected facilities using a CEMS for measuring PM are defined as any boiler operating day period during which the average emissions (arithmetic average of all operating one-hour periods) exceed the applicable standards under §60.43. Affected facilities using PM CEMS in lieu of a CEMS for monitoring opacity emissions must follow the most current applicable compliance and monitoring provisions in §§60.48Da and 60.49Da of subpart Da of this part.

§ 60.46 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, and subsequent performance tests as requested by the EPA Administrator, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (d) of this section.

(b) The owner or operator shall determine compliance with the PM, SO_2, and NO_Xstandards in §§60.42, 60.43, and 60.44 as follows:

(1) The emission rate (E) of PM, SO_2, or NO_Xshall be computed for each run using the following equation:

$$E = CF_d\left(\frac{20.9}{(20.9 - \%O_2)}\right)$$

Where:

E = Emission rate of pollutant, ng/J (1b/million Btu);

C = Concentration of pollutant, ng/dscm (1b/dscf);

$\%O_2$= O_2concentration, percent dry basis; and

F_d= Factor as determined from Method 19 of appendix A of this part.

(2) Method 5 of appendix A of this part shall be used to determine the PM concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems and Method 5B of appendix A of this part shall be used to determine the PM concentration (C) after FGD systems.

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train shall be set to provide an average gas temperature of 160±14 °C (320±25 °F).

(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B of appendix A of this part shall be used to determine the O_2concentration ($\%O_2$). The O_2sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab

sampling procedure is used, the O_2concentration for the run shall be the arithmetic mean of the sample O_2concentrations at all traverse points.

(iii) If the particulate run has more than 12 traverse points, the O_2traverse points may be reduced to 12 provided that Method 1 of appendix A of this part is used to locate the 12 O_2traverse points.

(3) Method 9 of appendix A of this part and the procedures in §60.11 shall be used to determine opacity.

(4) Method 6 of appendix A of this part shall be used to determine the SO_2concentration.

(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.

(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B of appendix A of this part shall be used to determine the O_2concentration (%O_2). The O_2sample shall be taken simultaneously with, and at the same point as, the SO_2sample. The SO_2emission rate shall be computed for each pair of $SO_2$and O_2samples. The SO_2emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.

(5) Method 7 of appendix A of this part shall be used to determine the NO_Xconcentration.

(i) The sampling site and location shall be the same as for the SO_2sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.

(ii) For each NO_Xsample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B of appendix A of this part shall be used to determine the O_2concentration (%O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_Xsample.

(iii) The NO_Xemission rate shall be computed for each pair of $NO_X$and O_2samples. The NO_Xemission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

(c) When combinations of fossil fuels or fossil fuel and wood residue are fired, the owner or operator (in order to compute the prorated standard as shown in §§60.43(b) and 60.44(b)) shall determine the percentage (w, x, y, or z) of the total heat input derived from each type of fuel as follows:

(1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.

(2) ASTM Methods D2015, or D5865 (solid fuels), D240 (liquid fuels), or D1826 (gaseous fuels) (all of these methods are incorporated by reference, see §60.17) shall be used to determine the gross calorific values of the fuels. The method used to determine the calorific value of wood residue must be approved by the Administrator.

(3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.

(d) The owner or operator may use the following as alternatives to the reference methods and procedures in this section or in other sections as specified:

(1) The emission rate (E) of PM, $SO_2$and NO_Xmay be determined by using the Fc factor, provided that the following procedure is used:

(i) The emission rate (E) shall be computed using the following equation:

$$E = CF_c \left(\frac{100}{\%CO_2} \right)$$

Where:

E = Emission rate of pollutant, ng/J (lb/MMBtu);

C = Concentration of pollutant, ng/dscm (lb/dscf);

$\%CO_2$= CO_2concentration, percent dry basis; and

F_c= Factor as determined in appropriate sections of Method 19 of appendix A of this part.

(ii) If and only if the average Fc factor in Method 19 of appendix A of this part is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B of appendix A of this part shall be used to determine the $O_2$and CO_2concentration according to the procedures in paragraph (b)(2)(ii), (4)(ii), or (5)(ii) of this section. Then if F_o(average of three runs), as calculated from the equation in Method 3B of appendix A of this part, is more than ±3 percent than the average $F_o$value, as determined from the average values of $F_d$and $F_c$in Method 19 of appendix A of this part, *i.e.* , F_{oa}= 0.209 (F_{da}/F_{ca}), then the following procedure shall be followed:

(A) When $F_o$is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, *e.g.* , if $F_o$is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When $F_o$is less than 0.97 $F_{oa}$and when the average difference (d) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, *e.g.* , if $F_o$is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When $F_o$is greater than 1.03 $F_{oa}$and when the average difference d is positive, then E shall be decreased by that proportion over 1.03 F_{oa}, *e.g.* , if $F_o$is 1.05 F_{oa}, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(2) For Method 5 or 5B of appendix A of this part, Method 17 of appendix A of this part may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 16 0 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B of appendix A of this part may be used with Method 17 of appendix A of this part only if it is used after wet FGD systems. Method 17 of appendix A of this part shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.

(3) Particulate matter and SO_2may be determined simultaneously with the Method 5 of appendix A of this part train provided that the following changes are made:

(i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 of appendix A of this part is used in place of the condenser (section 2.1.7) of Method 5 of appendix A of this part.

(ii) All applicable procedures in Method 8 of appendix A of this part for the determination of SO_2(including moisture) are used:

(4) For Method 6 of appendix A of this part, Method 6C of appendix A of this part may be used. Method 6A of appendix A of this part may also be used whenever Methods 6 and 3B of appendix A of this part data are specified to determine the SO_2emission rate, under the conditions in paragraph (d)(1) of this section.

(5) For Method 7 of appendix A of this part, Method 7A, 7C, 7D, or 7E of appendix A of this part may be used. If Method 7C, 7D, or 7E of appendix A of this part is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2concentration ($\%O_2$) for the emission rate correction factor.

(6) For Method 3 of appendix A of this part, Method 3A or 3B of appendix A of this part may be used.

(7) For Method 3B of appendix A of this part, Method 3A of appendix A of this part may be used.

Appendix K: 40 CFR 63 Subpart Q

Subpart Q—National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers

Source: 59 FR 46350, Sept. 8, 1994, unless otherwise noted.

§ 63.400 Applicability.

(a) The provisions of this subpart apply to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals and are either major sources or are integral parts of facilities that are major sources as defined in §63.401.

(b) Table 1 of this subpart specifies the provisions of subpart A that apply and those that do not apply to owners and operators of IPCT's subject to this subpart.

[59 FR 46350, Sept. 8, 1994, as amended at 71 FR 17738, Apr. 7, 2006]

§ 63.401 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

Chromium-based water treatment chemicals means any combination of chemical substances containing chromium used to treat water.

Commenced means, with respect to construction or reconstruction of an IPCT, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected IPCT is required to be in compliance with this subpart.

Construction means the on-site fabrication, erection, or installation of an IPCT.

Cooling tower means an open water recirculating device that uses fans or natural draft to draw or force ambient air through the device to cool warm water by direct contact.

Effective date means September 8, 1994, for this subpart.

Existing IPCT means any affected IPCT that is not a new IPCT.

Industrial process cooling tower, also written as “IPCT,” means any cooling tower that is used to remove heat that is produced as an input or output of a chemical or industrial process(es), as well as any cooling tower that cools industrial processes in combination with any heating, ventilation, or air conditioning system.

Initial startup means the initiation of recirculation water flow within the cooling tower.

Major source means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.

New IPCT means any affected IPCT the construction or reconstruction of which commenced after August 12, 1993.

Owner or operator means any person who owns, leases, operates, controls, or supervises an IPCT.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Reconstruction means the replacement of components of an affected or a previously unaffected IPCT to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new IPCT.

Responsible official means one of the following:

(1) For a corporation: a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Administrator.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).

(4) For affected sources (as defined in this part) applying for or subject to a title V permit: “responsible official” shall have the same meaning as defined in part 70 of this chapter or Federal title V regulations (42 U.S.C. 7661), whichever is applicable.

Water treatment chemicals means any combination of chemical substances used to treat water in cooling towers, including corrosion inhibitors, antiscalants, dispersants, and any other chemical substances used to treat water.

§ 63.402 Standard.

No owner or operator of an IPCT shall use chromium-based water treatment chemicals in any affected IPCT.

§ 63.403 Compliance dates.

The requirements of §63.402 of this subpart shall be applied on the following schedule:

(a) For existing IPCT's, the compliance date shall be 18 months after September 8, 1994.

(b) For new IPCT's that have an initial startup before September 8, 1994, the compliance date shall be September 8, 1994.

(c) For new IPCT's that have an initial startup on or after September 8, 1994, the compliance date shall be the date of the initial startup.

§ 63.404 Compliance demonstrations.

No routine monitoring, sampling, or analysis is required. In accordance with section 114 of the Act, the Administrator or delegated authority can require cooling water sample analysis of an IPCT if there is information to indicate that the IPCT is not in compliance with the requirements of §63.402 of this subpart. The owner or operator of an IPCT may demonstrate compliance through recordkeeping in accordance with paragraph (c) of this section in lieu of a water sample analysis. If cooling water sample analysis is required:

(a) The water sample analysis shall be conducted in accordance with Method 7196, Chromium, Hexavalent (Colorimetric), contained in the Third Edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW–846, (November 1986) and its Revision I, (December 1987), which are available for the cost of $110.00 from the Government Printing Office, Superintendent of Documents, Washington, DC 20402, (202) 783–3238 (document number 955–001–00000–1; or Method 3500–Cr D, Colorimetric Method, contained in the 18th Edition of "Standard Methods for the Examination of Water and Wastewaster" (1992), which is available from the American Public Health Association, 1015 15th Street, NW., Washington, DC 20005. These methods were approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be inspected as a part of Docket A–91–65, located at the Air and Radiation Docket and Information Center, room M1500, EPA Central Docket Section, 401 M St., SW., Washington, DC. Copies may be inspected at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

(b) On or after 3 months after the compliance date, a cooling water sample residual hexavalent chromium concentration equal to or less than 0.5 parts per million by weight shall indicate compliance with §63.402. Alternatively, an owner or operator may demonstrate compliance through record keeping in accordance with paragraph (c).

(c) To demonstrate compliance with §63.402, in lieu of the water sample analysis provided for in paragraph (a) of this section, the owner or operator of each IPCT may maintain records of water treatment chemical purchases, including invoices and other documentation that includes invoices and other documentation that includes date(s) of purchase or shipment, trade name or other information to identify composition of the product, and quantity of the product.

(d) Following a request, by the Administrator or delegated authority, under paragraph (a) for a water sample analysis, failure to either meet the concentration level specified in paragraph (b) or provide the records specified in paragraph (c) shall indicate a violation of §63.402.

[59 FR 46350, Sept. 8, 1994, as amended at 63 FR 39519, July 23, 1998; 69 FR 18803, Apr. 9, 2004]

§ 63.405 Notification requirements.

(a) *Initial notification.* (1) In accordance with §63.9(b) of subpart A, owners or operators of all affected IPCT's that have an initial startup before September 8, 1994, shall notify the Administrator in writing. The notification, which shall be submitted not later than 12 months after September 8, 1994, shall provide the following information:

(i) The name and address of the IPCT owner or operator;

(ii) The address (i.e., physical location) of the affected IPCT;

(iii) A statement that the notification is being submitted as required by this subpart; and

(iv) A description of the type of water treatment program used in the affected IPCT, including the chemical name of each corrosion inhibitor ingredient used; the average concentration of those corrosion inhibitor ingredients maintained in the cooling water; and the material safety data sheet for each water treatment chemical or chemical compound used in the IPCT.

(2) In accordance with §63.9(b) of subpart A, owners or operators of all affected IPCT's that have an initial startup on or after September 8, 1994, shall notify the Administrator in writing that the source is subject to the relevant standard no later than 12 months after initial startup. The notification shall provide all the information required in paragraphs (a)(1)(i) through (a)(1)(iv) of this section.

(b) *Notification of compliance status.* (1) In accordance with §63.9(h) of subpart A, owners or operators of affected IPCT's shall submit to the Administrator a notification of compliance status within 60 days of the date on which the IPCT is brought into compliance with §63.402 of this subpart and not later than 18 months after September 8, 1994.

(2) The notification of compliance status must:

(i) Be signed by a responsible official who also certifies the accuracy of the report;

(ii) Certify that source has complied with §63.402 of this subpart; and

(iii) Include the information required in paragraph (a)(1)(iv) of this section.

(iv) Include the following statement:

I certify that no chromium-based water treatment chemicals have been introduced since (the initial compliance date) into any IPCT located within the facility for any purpose.

§ 63.406 Recordkeeping and reporting requirements.

To demonstrate continuing compliance with §63.402 of this subpart, the owner or operator of each affected IPCT shall maintain copies of the initial notification and the notification of compliance status as required by §63.405 of this subpart for a period of at least 5 years onsite.

§ 63.407 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.400 and 63.402 through 63.403.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.

(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

[68 FR 37348, June 23, 2003]

Table 1 to Subpart Q of Part 63—General Provisions Applicability to Subpart Q

Reference	Applies to Subpart Q	Comment
63.1	Yes	
63.2	Yes	
63.3	No	
63.4	Yes	
63.5	No	
63.6 (a), (b), (c), and (j)	Yes	
63.6 (d), (e), (f), (g), (h), and (i)	No	
63.7	No	
63.8	No	
63.9 (a), (b)(1), (b)(3), (c), (h)(1), (h)(3), (h)(6), and (j)	Yes	
63.9 (b)(2), (b)(4), (b)(5), (b)(6), (d), (e), (f), (g), (h)(2), (h)(4), (h)(5)	No	Requirements for initial notifications and notifications of compliance status are specified in §63.405(a) and §63.405(b), respectively, of subpart Q; other provisions of subpart A are not relevant to IPCT's.
63.10 (a), (b)(1), (b)(2)(xii), (b)(2)(xiv), (b)(3), (d), and (f)	Yes	Section 63.406 requires an onsite record retention of 5 years.
63.10 (b)(2) (i) to (xi), (c), and (e)	No	
63.11	No	
63.12 to 63.15	Yes	