

*West Virginia Department of Environmental Protection
Division of Air Quality*

*Joe Manchin, III
Governor*

*Randy C. Huffman
Cabinet Secretary*

Permit to Operate



*Pursuant to
Title V
of the Clean Air Act*

Issued to:
Clearon Corporation
Chlorinated Dry Bleach Plant, South Charleston
R30-03900011-2008

*John A. Benedict
Director*

*Issued: December 15, 2008 • Effective: January 1, 2009
Expiration: December 15, 2013 • Renewal: June 15, 2013*

Permit Number: **R30-03900011-2008**
Permittee: **Clearon Corporation**
Facility Name: **South Charleston Chlorinated Dry Bleach Plant**
Mailing Address: **95 MacCorkle Avenue, South Charleston, WV 25303**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: South Charleston, Kanawha County, West Virginia
Facility Mailing Address: 95 MacCorkle Avenue, South Charleston, WV 25303
Telephone Number: (304) 746-3000
Type of Business Entity: Corporation
Facility Description: Production of purified cyanuric acid and chlorinated isocyanates (CDB)
SIC Codes: 2819
UTM Coordinates: 438.4 km Easting • 4,246.6 km Northing • Zone 17

Permit Writer: Jesse Hanshaw, P.E.

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0.	Emission Units and Active R13, R14 and R19 Permits	4
1.0.	Emission Units	4
1.1.	Active R13, R14 and R19 Permits	11
2.0.	General Conditions	12
2.1.	Definitions	12
2.2.	Acronyms	12
2.3.	Permit Expiration and Renewal	13
2.4.	Permit Actions	13
2.5.	Reopening for Cause	13
2.6.	Administrative Permit Amendments	14
2.7.	Minor Permit Modifications	14
2.8.	Significant Permit Modification	14
2.9.	Emissions Trading	14
2.10.	Off-Permit Changes	14
2.11.	Operational Flexibility	15
2.12.	Reasonably Anticipated Operating Scenarios	16
2.13.	Duty to Comply	16
2.14.	Inspection and Entry	16
2.15.	Schedule of Compliance	16
2.16.	Need to Halt or Reduce Activity not a Defense	17
2.17.	Emergency	17
2.18.	Federally-Enforceable Requirements	18
2.19.	Duty to Provide Information	18
2.20.	Duty to Supplement and Correct Information	18
2.21.	Permit Shield	18
2.22.	Credible Evidence	19
2.23.	Severability	19
2.24.	Property Rights	19
2.25.	Acid Deposition Control	19
3.0.	Facility-Wide Requirements	20
3.1.	Limitations and Standards	20
3.2.	Monitoring Requirements	21
3.3.	Testing Requirements	22
3.4.	Recordkeeping Requirements	23
3.5.	Reporting Requirements	23
3.6.	Compliance Plan	25
3.7.	Permit Shield	25
4.0.	Natural Gas Boilers	26
4.1.	Limitations and Standards	26
4.2.	Monitoring Requirements	27
4.3.	Recordkeeping Requirements	28
4.4.	Reporting Requirements	28

5.0.	Urea Unloading	30
5.1.	Limitations and Standards	30
5.2.	Monitoring Requirements	31
5.3.	Recordkeeping Requirements	31
6.0.	Crude Cyanuric Acid Production	32
6.1.	Limitations and Standards	32
6.2.	Monitoring Requirements	35
6.3.	Recordkeeping Requirements	36
7.0.	CA Purification	38
7.1.	Limitations and Standards	38
7.2.	Monitoring Requirements	38
7.3.	Recordkeeping Requirements	39
8.0.	Cyanuric Acid Granular	40
8.1.	Limitations and Standards	40
8.2.	Monitoring Requirements	40
8.3.	Recordkeeping Requirements	40
9.0.	CDB-56, CDB-90, Back End Waste Processes	41
9.1.	Limitations and Standards	41
9.2.	Monitoring Requirements	42
9.3.	Recordkeeping Requirements	43
10.0.	CDB-63 Process	45
10.1.	Limitations and Standards	45
10.2.	Monitoring Requirements	45
10.3.	Recordkeeping Requirements	45
11.0.	Emergency Generator	47
11.1.	Limitations and Standards	47
11.2.	Monitoring Requirements	47
11.3.	Recordkeeping Requirements	47
	Appendix B R13-2050F Minimum Recordkeeping Requirements	48

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
<i>Natural Gas Boilers</i>					
ST-110 (<i>F-110</i>)	-----	H-110	Boiler	26.8 MMBtu/hr	1996
ST-112	-----	H-112	Boiler	32.5 MMBtu/hr	2003
<i>Urea/Cyanuric Acid Unloading</i>					
ST-176 (<i>F-176</i>)	S-151-A Urea Baghouse	T-151	Urea Dissolution Tank	8,016 gallons	1983
	S-195 Urea Baghouse	T-191	Urea Dissolution Tank	8,016 gallons	1983
Fugitive	Building 520	C-194	Bucket Elevator		2008
Fugitive	Building 520	T-194	Unloading Hopper		2008
Fugitive	Building 520	T-193	Unloading Pit		2008
Fugitive	Building 520	C-193	Screw Feeder		2008
Fugitive	Building 520	Y-194	Scales		2008
<i>Crude Cyanuric Acid Production</i>					
ST-102 (<i>F-102</i>) Zone A Combustion Emissions	-----	F-101	A Calciner Manufacturer: Bartlett-Snow-Pacific, Inc. (Includes the following equipment: A-Kiln F-101, A Kiln recycle bin T-102, discharge conveyor C111, feed conveyor C112, elevator C101, recycle discharge bin conveyor C-106)	18.9 MMBtu/hr or 9.45 MMBtu/hr/zone Natural Gas 2,800 pph 12,264 tpy	1963
ST-103 (<i>F-103</i>) Zone B Combustion Emissions	-----				
ST-130 (<i>F-105</i>) Process Emissions	D-101 A Scrubber F-104 A Ammonia Afterburner				
ST-122 (<i>F-122</i>) Zone A Combustion Emissions	-----	F-121	B Calciner- Not in service Manufacturer: Bartlett-Snow-Pacific, Inc. (Includes the following equipment: B Kiln, screw conveyors, a bucket elevator, a recycle tank, and a feed tank)	18.9 MMBtu/hr or 9.45 MMBtu/hr/zone Natural Gas 2,800 pph 12,264 tpy	1968
ST-123 (<i>F-123</i>) Zone B Combustion Emissions	-----				

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
ST-131 (<i>F-125</i>) Process Emissions	D-121 B Scrubber F-124 B Ammonia Afterburner				
ST-162 (<i>F-162</i>) Zone A Combustion Emissions	----	F-161	C Calciner Manufacturer: Bartlett-Snow-Pacific, Inc. (Includes the following equipment: C Kiln, screw conveyors, a bucket elevator, a recycle tank and a feed tank)	18.9 MMBtu/hr or 9.45 MMBtu/hr/zone Natural Gas 2,800 pph 12,264 tpy	1972
ST-163 (<i>F-163</i>) Zone B Combustion Emissions	----				
ST-171 (<i>F-171</i>) Process Emissions	D-161 C Scrubber F-164 C Ammonia Afterburner				
ST-1802 Combustion Emissions	----	F-1801	D Calciner Manufacturer: Svedala (Includes the following equipment: D Kiln Recycle Bin T-1802, Discharge Screw C-1811, Feed Screw C-1812, Elevator C-1801, Recycle Feed Bin Screw C-1813, Recycle Bin Discharge Conveyor C-1806, Screw Conveyor C-1814, Screw Conveyor C-1815, Receiver Conveyor C- 1803)	14.8 MMBtu/hr Natural Gas 3,500 pph 15,330 tpy	1997
ST-1806 Process Emissions	D-1801 D Scrubber F-1804 D Ammonia Afterburner				

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed	
<i>CA Purification</i>						
D-222	H-204 Digestion Barometric Condenser (Claimed as process equipment)	T-285	Digester	21,000 gallons	1996	
		T-275	Digester	11,000 gallons	1988	
		T-245	Flash Tank	11,000 gallons	1986	
		T-203	Flash Tank	11,000 gallons	1987	
	D-232 Venturi Water Scrubber (Claimed as process equipment)	H-204	Digestion Barometric Condenser	12 3/4" Diameter Barometric	1989	
		T-230	Slurry Tank	2,500 gallons	1983	
		T-350	Acid Mix Tank	11,000 gallons	1986	
		T-233	Digester - Not in service	11,000 gallons	1969	
	D-222 Packed Bed Scrubber	D-232	Acid Vent Scrubber	18" Diameter x 11'9"	1988	
		T-349	Cold Acid Purge Tank	550 gallons	1986	
		T-334	Recycle Acid Tank	3,800 gallons	1995	
		T-387	Clarifier Feed Tank/Purge Acid Cooling Tank	2,800 gallons	1986	
		CE-301	Centrifuge	48" Diameter x 24"	1962	
		CE-302	Centrifuge	60" Diameter x 40"	1997	
		CE-321	Centrifuge	48" Diameter x 24"	1972	
		CE-322	Centrifuge	60" Diameter x 40"	1995	
		CE-323	Centrifuge - Not in service	48" Diameter x 24"	1972	
		CE-324	Centrifuge	60 " Diameter x 40"	1997	
		CE-343	Centrifuge	48" Diameter x 24"	1973	
		T-1204	Centrifuge Feed Tank	2,100 gallons	2002	
		T-234	Centrifuge Feed Tank	2,100 gallons	1995	
		T-301	Slurry Tank	3,800 gallons	2001	
		T-323	Slurry Tank - Not in service	1,000 gallons	1974	
		C-301 C-302 C-303 C-321 C-322 C-343 C-344 C-345	Conveyors	355 ft ³ /hr	1986	
	T-388	Clarifier	3,000 gallons	1986		
	N/A	----	T-882	Reprocessing Tank	2,500 gallons	1987

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
T-1007	-----	T-1007	93% Sulfuric Acid Storage Tank	20,000 gallons	1983
<i>Cyanuric Acid Granular</i>					
F-9861	S-8107	Y-9857	Scale	1,000 pph	1986
		C-9856	Screen		
		CU9855	Granulator		
		CP-9854	Compactor		
		T-9853	Hopper		
		C-9852	Bucket Elevator		
		T-9850	Hopper		
		SP-9851	Feeder		
<i>CDB-56 Process (DCCA)</i>					
N/A	-----	T-401	Feed Tank	20,000 gallons	1962
N/A	-----	T-402	Feed Tank	20,000 gallons	1962
N/A	-----	T-403	Reactor Tank	20,000 gallons	1962
N/A	-----	T-543	Primary Feed Tank	2,200 gallons	1973
ST-1601 (<i>F-1601</i>)	D-336A Scrubber	D-501	Chlorinator	2,650 gallons	1997
		D-541	Chlorinator	2,650 gallons	1997
		D-562A	Chlorinator	2,400 gallons	1979
		D-502B	Chlorinator	2,400 gallons	1979
		T-732	Salt Makeup Tank	1,000 gallons	1998
		CE-673	Centrifuge	60 gpm	1979
		CE-734	Centrifuge	100 gpm	1964
		CE-733	Centrifuge	100 gpm	1964
		CE-732	Centrifuge	100 gpm	2002
		CE-731	Centrifuge	100 gpm	2002
		C-731 C-732 C-737 C-736 C-734 C-335	Conveyors	42,000 pph	2000

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
ST-1001 (<i>F-1001</i>) (Common Stack with C-8070 & C-8060)	S-832 Baghouse	F-831	Dryer	3.5 MMBtu/hr	1970
	S-831 Baghouse	C-833	Mill	9,000 cfm	1966
ST-954 (<i>F-954</i>)	C-9540 Baghouse	H-831	Heater	720,000 Btu/hr	1964
		T-801A	Chilsonator Feed Bin	80 ft ³	1984
		CP-905	Chilsonator	4,100 pph	1966
		CU-900	Granulator	4,100 pph	1966
		CU-951	Granulator	1,000 pph	1966
ST-958 (<i>F-958</i>)	C-9580 Baghouse	H-953	Heater	720,000 Btu/hr	1964
		SC-986A	Sizing Screen	8,5000 pph	1997
		SC-986B	Sizing Screen	8,500 pph	1997
		SC-915	Sizing Screen	6,500 pph	1997
		SC-914	Sizing Screen	6,500 pph	1997
		SC-917	Sizing Screen	8,500 pph	1997
		SC-918	Sizing Screen	8,500 pph	1997
		T-915	Surge Tank	80 ft ³ working cap	Before 1986
		T-914	Surge Tank	80 ft ³ working cap	Before 1986
		T-917	Surge Tank	50 ft ³	1995
		Y-914	Packaging Equipment	18,400 lbs	1995
		Y-915	Packaging Equipment	18,400 lbs	1995
		Y-916	Packaging Equipment	45,537 lbs	Before 1985
		Y-917	Packaging Equipment	8,806 lbs	2001
<i>CDB-90 Process (TCCA)</i>					
N/A	----	T-431	Feed Tank	20,000 gallons	1962
N/A	----	T-432	Feed Tank	20,000 gallons	1962
N/A	----	T-433	Feed Tank	20,000 gallons	1962
ST-1601 (<i>F-1601</i>)	D-336A Scrubber	D-570	Chlorinator	4,000 gallons	2001
		N/A	Chlorine Unloading (Chlorine Railcar)	11,000 pph	2001
		H-566	Vaporizer	8,000 pph	1983
		D-3136A	NaOCl Generator	4' x 25' 10" Scrubber	1998
		T-3136	NaOCl Storage Tank	3,000 gallons	2008
		I-700	Filter	133 ft ³ filter surface	1995

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
		T-700A	Filter Receiver	300 gallons	1995
		T-700B	Filter Receiver	300 gallons	1995
		T-7825	Acid Storage Tank (HCL 36%)	20,000 gallons	1995
		D-7827	Stripper	3'6" x 39'6"	1998
ST-1601 (<i>F-1601</i>) (Continued)	D-336A Scrubber	T-567	Acid Generator (HOCL - hypochlorous acid)	30 gallons	1995
		T-7811	Low pH Waste Treatment Feed Tank	20,000 gallons	1999
		T-7812A T-7812	High pH Waste Treatment Feed Tank - Retired High pH Waste Treatment Feed Tank	20,000 gallons 20,000 gallons	1998 1999
		T-767A	CDB 56 Scrap Recovery	1,950 gallons	1976
		T-769	CDB 90 Scrap Recovery	4,500 gallons	1994
		T-700C	Vacuum Pump Exhaust Separator	300 gallons	1997
		T-704	Centrifuge Filtrate Tank	2,300 gallons	1998
		T-7826	Acidifier	7,500 gallons	2007
ST-1001 (<i>F-1001</i>) (Common Stack with S-831 & S-832)	C-8070 Baghouse	H-803	Heater	4.5 MMBtu/hr	1995
		C-803	Mill	7,500 pph	2003
	C-8060 Baghouse	C-802	Filter Discharge Screw	7,500 pph	2001
ST-904 (<i>F-904</i>)	C-9040 Baghouse	H-904	Heater	720,000 Btu/hr	1964
		T-801A	Chilsonator Feed Bins	50 ft ³	1995
		C-975	Chilsonator	12,000 pph	2000
		CU-971	Granulator	12,600 pph	1972
		CU-975	Granulator	3,000 pph	1995
ST-978 (<i>F-978</i>)	C-9780 Baghouse	SC-909A	Sizing Screen	72" Diameter	1995
		SC-909B	Sizing Screen	72" Diameter	1995
		SC-910B	Sizing Screen	60" Diameter	2002
		T-987	Surge Tank	150 ft ³	1995
		Y-970A	Packaging Equipment	7,500 pph	2008
		Y-970B	Packaging Equipment	7,500 pph	1995
Back End Waste					
ST-1601 (<i>F-1601</i>)	D-336A Scrubber	T-740	Fugitive Waste Collection Sump	12,000 gallons	1964
		T-7813B	Reactor	11,000 gallons	1976
		T-7804	Centrifuge Feed Tank	12,000 gallons	1976
		CE-7802	Centrifuge	200 gpm	1979
		T-7820	Neutralization Tank	23,000 gallons	1986

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Design Capacity	Year Installed
		T-7821A	Sodium Hypochlorite Storage	23,500 gallons	2000
		T-7821B	Sodium Bisulfite Storage	21,000 gallons	1986
		T-7850	Neutralization Sump	3,500 gallons	1964
N/A	----	T-7810	Hydrogen Peroxide Tank	13,000 gallons	1974
N/A	----	T-7805	Head Tank	100 gallons	1974
N/A	----	T-7819	Repulp Tank	900 gallons	1976
N/A	----	T-7806	Surge Tank	20,000 gallons	1976
			<i>CDB-63</i>		
ST-9912	S-8104	T-9901	Feed Hopper	1,375 pph	1987
		C-9903	Screw Conveyor	1,375 ppph	1987
		DR-9904	Dryer	1,375 pph	1987
		H-9907 H-9908 H-9909	Heaters	1,375 pph	1987
		T-9908	Packaging	1,375 pph	2001
			<i>Cooling Towers</i>		
N/A	----	H-1314	Cooling Tower	14 MMBtu/hr	1976
N/A	----	H-1014	Cooling Tower	10 MMBtu/hr	1969
N/A	----	H-107	Cooling Tower	3.1 MMBtu/hr	1997
			<i>Generators</i>		
N/A	----	EG-100	Generator	1,340 HP	1997
N/A	----	EG-200	Generator	1,310 HP	1976
N/A	----	EG-400	Generator	745 HP	1991

1.2. Active R13, R14 and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g., R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2050F	September 15, 2008
R13-2597	October 25, 2004
R13-1724A	July 17, 2003
R13-1922A	January 28, 2003
R13-1698	March 18, 1994
R13-0894	October 6, 1986

2.0. General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source
CBI	Confidential Business Information		Performance Standards
CEM	Continuous Emission Monitor	PM	Particulate Matter
CES	Certified Emission Statement	PM₁₀	Particulate Matter less than 10µm in diameter
C.F.R. or CFR	Code of Federal Regulations		
CO	Carbon Monoxide	pph	Pounds per Hour
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million
DAQ	Division of Air Quality	PSD	Prevention of Significant Deterioration
DEP	Department of Environmental Protection		
FOIA	Freedom of Information Act	psi	Pounds per Square Inch
HAP	Hazardous Air Pollutant	SIC	Standard Industrial Classification
HON	Hazardous Organic NESHAP		
HP	Horsepower	SIP	State Implementation Plan
lbs/hr	Pounds per Hour		
LDAR	Leak Detection and Repair	SO₂	Sulfur Dioxide
M	Thousand	TAP	Toxic Air Pollutant
MACT	Maximum Achievable Control Technology	TPY	Tons per Year
		TRS	Total Reduced Sulfur
MM	Million	TSP	Total Suspended Particulate
MMBtu/hr or mmbtu/hr	Million British Thermal Units per Hour	USEPA	United States Environmental Protection Agency
MMCF/hr or mmcf/hr	Million Cubic Feet Burned per Hour		
NA	Not Applicable	UTM	Universal Transverse Mercator
NAAQS	National Ambient Air Quality Standards	VEE	Visual Emissions Evaluation
NESHAPS	National Emissions Standards for Hazardous Air Pollutants	VOC	Volatile Organic Compounds
NO_x	Nitrogen Oxides		

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. 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.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
- a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is 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 has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. 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 the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
- b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
- c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. 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 this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall 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 permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

- 2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

- 2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]
- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

- 2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary 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 shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

- 2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

- 2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]
- 2.21.2. Nothing in this permit shall alter or affect the following:
- a. 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; or
 - b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
 - c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.

[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.

[45CSR§30-5.1.a.2.]

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b), and 45CSR15]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 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 40 C.F.R. § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** This stationary source, as defined in 40 C.F.R. § 68.3, is subject to Part 68. This stationary source shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10. This stationary source shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

3.1.9. **Fugitives.** No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.

[45CSR§7-5.1.]

3.1.10. **Fugitives.** The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR§7-5.2]

3.2. Monitoring Requirements

3.2.1. For the purpose of determining compliance with the opacity limit stated in conditions 5.1.6., 6.1.1., 7.1.4., 8.1.3., 9.1.1., and 10.1.1., the permittee shall conduct opacity monitoring and recordkeeping for all emission points and equipment in service that are subject to the opacity limit under 45CSR7.

As an alternative to opacity monitoring, the permittee may elect to conduct visible emission checks and, if need be, visible emission observations. The visible emission check is used to determine the presence or absence of visible particulate matter emissions. A visible emission observation uses U.S. EPA Method 9, Method 22, or the procedure outlined in 45CSR§7A-2.1.a., or other method approved by the Director, to more precisely determine opacity. If visible emissions are observed during a visible emission check, corrective action must be taken to return the emission point to no visible emissions, or a visible observation must be conducted to determine that the opacity is 20% or less.

Opacity monitoring consisting of visible emission checks, or visible emission observations shall be conducted at least once per calendar month. If opacity remains 20% or less for three consecutive months, opacity monitoring/checks/observations may be conducted quarterly. If opacity should exceed 20% during quarterly observations, monthly readings must be implemented until three consecutive monthly readings of 20% or less opacity are recorded. Visible emission checks of the emission points shall be performed for a sufficient time interval, but no less than one (1) minute, to determine if any visible emissions are present. Opacity monitoring or visible emission checks, or visible emission observations shall be performed during periods of normal facility/unit operation and appropriate weather conditions.

[45CSR§30-5.1.c.; 45CSR13, R13-2050, B.6.]

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
 - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4(a)(15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
- a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

- 3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

- 3.4.4. **Fugitives.** The permittee shall monitor all fugitive particulate emission sources as required by 3.1.10. To ensure that a system to minimize fugitive emissions has been installed or implemented. Records shall be maintained on site stating the types of fugitive particulate capture and/or suppression systems used, the times these systems were inoperable, and the corrective actions taken to repair these systems.

[45CSR§30-5.1.c.]

- 3.4.5. **Fugitives.** The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures as required by 3.1.11. applied at the facility. These records shall be maintained on site.

[45CSR§30-5.1.c.]

3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§30-4.4. and 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review
(3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on September 15 for the reporting period January 1 to June 30 and March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance

with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. NA

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.
 - a. None requested.

4.0. Natural Gas Boilers

Emission Point: ST-110, ST-112

4.1. Limitations and Standards

- 4.1.1. The maximum design heat input of the natural gas-fired boiler (H-110) shall be 26.8 MMBtu/hr. (ST-110) [45CSR13, R13-1922, A.1.]
- 4.1.2. Boiler H-110 shall be fueled only by natural gas. (ST-110) [45CSR13, R13-1922, A.2.]
- 4.1.3. The hourly fuel consumption of natural gas shall not exceed 29,467 DSCF. (ST-110) [45CSR13, R13-1922, A.3.]
- 4.1.4. The annual fuel consumption of natural gas shall not exceed 258,128,642 DSCF. The fuel usage limitation shall be based on a 12 month rolling yearly total. (ST-110) [45CSR13, R13-1922, A.4.]
- 4.1.5. Boiler H-110 shall be equipped with and employ low-NO_x (nitrogen oxides) burners when in use. (ST-110) [45CSR13, R13-1922, A.5.]
- 4.1.6. The maximum allowable hourly and annual emissions to the atmosphere (emission point F-110) from Boiler H-110 are as follows:

Pollutant	Maximum Emissions	
	pph	TPY
Carbon Monoxide (CO)	1.923	8.42
Nitrogen Oxides (NO _x)	2.554	11.19
Sulfur Dioxide (SO ₂)	0.019	0.08
Total Particulate Matter (PM)	0.432	1.89
Volatile Organic Compounds (VOC)	0.042	0.18

Compliance with the limitations established for PM and SO₂ by the minor source NSR permit assure compliance with the requirements of 45CSR§2-4.1.b and 45CSR§10-3.2.c. (ST-110) [45CSR13, R13-1922, A.6., 45CSR§2-4.1.b, 45CSR§10-3.2.c]

- 4.1.7. The maximum emissions to the atmosphere from the Cleaver Brooks boiler (H-112), shall not exceed the following hourly and annual limits:

Pollutant	Hourly Emissions pph	Annual Emissions TPY
Nitrogen Oxides (NO _x)	2.55	11.17
Carbon Monoxide (CO)	1.92	8.41
Particulate Matter (PM)	0.43	1.89
Volatile Organic Compounds (VOC)	0.18	0.80
Sulfur Dioxide (SO ₂)	0.02	0.08

Compliance with the limitations established for PM and SO₂ by the minor source NSR permit assure compliance with the requirements of 45CSR§2-4.1.b and 45CSR§10-3.2.c. (ST-112) [45CSR13, R13-2597, 4.1.1., 45CSR§2-4.1.b, 45CSR§10-3.2.c]

- 4.1.8. The maximum design heat input for the Cleaver Brooks 32.5 MMBtu/hr boiler (H-112), shall not exceed 32,500,000 Btu/hr. (ST-112) [45CSR13, R13-2597, 4.1.2.]
- 4.1.9. The maximum natural gas fuel usage for the Cleaver Brooks 32.5 MMBtu/hr boiler (H-112) shall not exceed 29,435 cubic feet/hour. (ST-112) [45CSR13, R13-2597, 4.1.3.]
- 4.1.10. For the purposes of this permit, compliance with all annual emission limits and throughput limits shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of the specified quantity at any given time for the previous twelve (12) consecutive calendar months. (ST-112) [45CSR13, R13-2597, 4.1.4.]
- 4.1.11. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. (ST-110, ST-112) [45CSR§2-3.1; 45CSR13, R13-1922, B.2 and R13-2597, 4.1.7.]

4.2. Monitoring Requirements

- 4.2.1. Method 22 visible emission observations shall be conducted monthly during periods of normal operation for a sufficient time interval to determine if the unit has visible emissions. If the source has visible emissions, then a 40 CFR 60, Appendix A, Method 9 evaluation shall be conducted within twenty four (24) hours unless the permittee can demonstrate a valid reason that the time frame should be extended. A Method 9 evaluation shall not be required if the condition resulting in the excess visible emissions is corrected within 24 hours and the units are operated at normal operating conditions. (ST-110, ST-112) [45CSR§2-3.2; 45CSR13, R13-2597, 4.2.1.]

4.3. Recordkeeping Requirements

- 4.3.1. Records of each visible emission observation and each Method 9 evaluation conducted in accordance with 4.2.1. shall be maintained on site for a period of no less than five (5) years and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the Method 22 observer. (*ST-110, ST-112*)
[45CSR13, R13-2597, 4.4.1.]
- 4.3.2. The permittee shall maintain certified daily, monthly, and annual records of the amount of fuel used and daily records of hours of operation for Boiler H-110. Such records shall be retained by the permittee on site for at least five (5) years. Certified records shall be made available to the Director or his/her duly authorized representative upon request. In addition to the fuel use records, the permittee shall also maintain records of the quality of fuel consumed in the boiler. Fuel quality records for natural gas shall consist of an initial characterization provided by the fuel supplier which includes the ash, sulfur, moisture, volatile matter, and BTU content. These records shall also be retained on site for a period of five (5) years and made available to the Director or his/her duly authorized representative upon request. (*ST-110*)
[45CSR§2-8.3.c and 45CSR13, R13-1922, B.7]
- 4.3.3. To determine compliance with the maximum throughput limits set forth under 4.1.9, the permittee shall monitor and maintain records of the hours of operation and the daily, monthly, and twelve month rolling total fuel feed rate to the Cleaver Brooks 32.5 MMBtu/hr boiler (H-112). In addition to the fuel use records, the permittee shall also maintain records of the quality of fuel consumed in the boiler. Fuel quality records for natural gas shall consist of an initial characterization provided by the fuel supplier which includes the ash, sulfur, moisture, volatile matter, and BTU content. These records shall be maintained on site for a period of not less than five (5) years and certified records shall be made available to the Director or a duly authorized representative of the Director upon request. (*ST-112*)
[45CSR§2-8.3.c and 45CSR13, R13-2597, 4.4.3.]

4.4. Reporting Requirements

- 4.4.1. The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 C.F.R. §60.7. This notification shall include:
- a) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- (*ST-110, ST-112*)
[40 C.F.R. §60.48c(a), 40 C.F.R. §60.48c(a)(1); 45CSR13, R13-1922, B.5 and R13-2597, 4.5.1.]

4.4.2. All notifications and reports required pursuant to 40 C.F.R. 60 under §60.7 shall be forwarded to:

Director	and	Director, Air Protection Division
WVDEP		US Environmental Protection Agency
Division of Air Quality		Region III
601 57th Street SE		1650 Arch Street
Charleston, WV 25304		Philadelphia, PA 19103-2029

(*ST-110, ST-112*)

[45CSR13, R13-1922, B.6 and R13-2597, 4.5.2.]

4.4.3. The owner or operator of a fuel burning unit(s) subject to this rule shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity (i.e., emissions exceeding the standards in section 3 and 4 of 45CSR2) as provided in one of the following subdivisions:

- a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:
 - 1) The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and
 - 2) Excess opacity does not exceed 40%.
- b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 4.4.3.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:
 - 1) A detailed explanation of the factors involved or causes of the malfunction;
 - 2) The date and time of duration (with starting and ending times) of the period of excess emissions;
 - 3) An estimate of the mass of excess emissions discharged during the malfunction period;
 - 4) The maximum opacity measured or observed during the malfunction;
 - 5) Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 - 6) A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3]

5.0. Urea Unloading (Emission Point: ST-176)

5.1. Limitations and Standards

- 5.1.1. The permittee shall meet the specific hourly and annual emissions limits, as well as the venting arrangements defined by Appendix A of **R13-2050**. Any reference to an annual limit refers to any consecutive twelve (12) month period.

Compliance with this limit assures compliance with 45CSR§7-4.1.

Emission Point ID	Sources	Air Pollution Control Device	Particulate Matter	
			pph	TPY
ST-176 (F-176)	T-151 Urea Dissolution Tank	S-151-A Baghouse	0.221	0.376
	T-191 Urea Dissolution Tank	S-195 Baghouse		

[45CSR13, R13-2050, A.1., B.8. and Appendix A, 45CSR§7-4.1]

- 5.1.2. A maximum of 1,200,000 lb/day prilled urea shall be unloaded via railcar or truck to the facility. Rail car and truck unloading operations shall not occur simultaneously.

[45CSR13, R13-2050, A.8.]

- 5.1.3. The maximum annual quantity of prilled urea that shall be unloaded via railcar or truck to the facility shall not exceed 83,000 tons per year.

[45CSR13, R13-2050, A.9.]

- 5.1.4. The permittee shall install, calibrate, and maintain monitoring equipment to demonstrate that the following parameters are met during all times of operation for the following baghouses:

a.

Baghouse Identification	Minimum Static Pressure Drop (inches water)
S-151-A	2
S-195	2

- b. Monitoring and recordkeeping for each baghouse and for each parameter listed above shall be performed at a minimum of once per week to determine compliance with the permitted limits.
 c. The permittee shall be granted exception from this requirement for 24 hours following new bag(s) startup.

[45CSR13, R13-2050, A.10.]

- 5.1.5. The permittee shall install, calibrate, and maintain monitoring equipment on-site to demonstrate, at the permittee's discretion or upon request of Division of Air Quality personnel, that the following parameters are met during the operation of the following baghouses:

Baghouse Identification	Maximum Air Flow Rate (acfm)
S-151-A	1290
S-195	1290

[45CSR13, R13-2050, A.11.]

- 5.1.6. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity. (ST-176)
[45CSR§7-3.1. and 45CSR13, R13-2050, B.5.]

5.2. Monitoring Requirements

- 5.2.1. See condition 3.2.1. for opacity monitoring and recordkeeping requirements. (ST-176)
[45CSR§7-3.1.]
- 5.2.2. The equipment installed to measure the maximum air flow rate through the control devices shall be equipped with alarms to indicate when the maximum allowable air flow is exceeded.
[45CSR§30-5.1.c., Equipment ID (S-151-A, S-195)]
- 5.2.3. The permittee shall take static pressure drop and air flow rate measurements of the control devices at a minimum of once per week.
[45CSR13, R13-2050, B.1. and Appendix B, Table 3, Equipment ID (S-151-A, S-195)]

5.3. Recordkeeping Requirements

- 5.3.1. Records of each visible emission observation and each 45CSR7A evaluation conducted in accordance with 5.2.1. shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the Method 22 observer.
[45CSR§30-5.1.c., Emission Point (ST-176)]
- 5.3.2. The permittee shall maintain monthly records of the daily throughput of raw material (prilled urea) unloaded (lbs/day), the average unloading rate (lb/hr), and the source of the unloading (railcar or truck). Compliance with the annual throughput limit shall be demonstrated by maintaining a twelve month rolling total of raw material throughput. These records shall be maintained on site for a period of five (5) years and made available to the Director or his/her duly authorized representative upon request. A complete "Certification of Data Accuracy Form" must appear on the reverse side of each record.
[45CSR13, R13-2050, B.1. and Appendix B, Table 1, and 45CSR§30-5.1.c.]
- 5.3.3. Records of the static pressure drops and maximum air flow rates of the baghouses shall be maintained on site for a period of five (5) years and made available to the Director or his/her duly authorized representative upon request. A complete "Certification of Data Accuracy Form" must appear on the reverse side of each record.
[45CSR13, R13-2050, B.1. and Appendix B, Table 3, and 45CSR§30-5.1.c.]

6.0. Crude Cyanuric Acid Production

Emission Points: ST-102, ST-103, ST-130 [A Calciner]
ST-122, ST-123, ST-131 [B Calciner]
ST-162, ST-163, ST-171 [C Calciner]
ST-1802, ST-1806 [D Calciner]

6.1. Limits and Standards

- 6.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity. It is recognized that compliance with the opacity standard for manufacturing sources as defined above also assures compliance with the equivalent opacity standard defined by 45CSR6 for incinerators.

[45CSR§7-3.1., 45CSR§6-4.3., Emission Points (ST-130, ST-131, ST-171, ST-1806)]

- 6.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A of 45CSR7.

Emission Points	45CSR7 Hourly Particulate Emission Limit pph
ST-130	3.24
ST-131	3.24
ST-171	3.24
ST-1806	See 6.1.6

Compliance with 45CSR§7-4.1., 3.8 lb/hr, shall be demonstrated through compliance with the more stringent R13-2050 particulate emission limit of 0.304 lb PM/hr for emission point ST-1806 set forth in 6.1.6. Additionally it is recognized that compliance with the PM standard for manufacturing sources as defined above streamlines compliance with the PM standard defined by 45CSR6 for incinerators.

[45CSR§7-4.1., 45CSR§6-4.1.,]

- 6.1.3. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows: For Type 'b' fuel burning units, the product of 0.09 and the total design heat inputs for such units in million B.T.U.'s per hour, provided however that no more than six hundred (600) pounds per hour of particulate matter shall be discharged into the open air from all such units;

Emission Point	Burner Capacity Design Heat Input DHI (MM Btu)	45CSR2 Hourly Particulate Emission Limit pph
ST-102/103	9.45 / 9.45	0.85 / 0.85
ST-122/123	9.45/9.45	0.85 / 0.85
ST-162/163	9.45/9.45	0.85 / 0.85
ST-1802	14.8	See 6.1.6

Compliance with the 45CSR§2-4.1 hourly emission limit of 1.33 lb/hr, for ST-1802 shall be streamlined by demonstrating compliance with the more stringent R13-2050 hourly particulate emission limit of 0.164 lb PM/hr set forth in 6.1.6.

[45CSR§2-4.1.]

- 6.1.4. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.

[45CSR§2-3.1., Emission Point IDs (ST-102/103, ST-122/123, ST-162/163, ST-1802)]

- 6.1.5. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors.

[45CSR§6-4.6., Emission Point IDs (ST-130, ST-131, ST-171, ST-1806)]

- 6.1.6. The permittee shall meet the specific hourly and annual emissions limits, as well as the venting arrangements of Appendix A of R13-2050 as set forth in the following table. Any reference to an annual limit refers to any consecutive twelve (12) month period. (ST-1802/ST-1806)

[45CSR13, R13-2050, A.1. and Appendix A]

Table of 6.1.6. Emission Limits

Emission Point ID	Sources	Air Pollution Control Device	Carbon Monoxide		Nitrogen Oxides		Particulate Matter		Sulfur Dioxide		VOC		Ammonia	
			pph	TPY	pph	TPY	pph	TPY	pph	TPY	pph	TPY	pph	TPY
ST-1806	F-1801 Kiln D Offgas to D-1801 Urea Scrubber	F-1804 Ammonia Incinerator	0.777	3.40	6.90	30.2	0.304	1.33	0.013	0.058	0.062	0.271	28	122.6
	T-151 Urea Dissolution Tank ¹													
	T-191 Urea Dissolution Tank ¹													
	T-1001 Urea Dissolution Tank ¹													
	T-381 Ammonia Removal Tank to partial condenser ¹													
	T-382 Ammonia Removal Tank to partial condenser ¹													
	T-156A Captive Water Tank ¹													
	T-157A Demister Water Tank ¹													
	T-126 Ammonia Sump ¹													
	T-103 Crude CA Storage Tank ¹													
	T-1826 Sump Tank ¹													
	T-1802 D Kiln Recycle Bin													
	C-1811 D Kiln Discharge Screw													
	C-1812 D Kiln Feed Screw													
	C-1801 D Kiln Elevator													
	C-1813 D Kiln Recycle Feed Bin Screw													
	C-1806 Recycle Bin Discharge Conveyor													
	C-1814 D Kiln Screw Conveyor													
C-1815 D Kiln Screw Conveyor														
C-1803 D Kiln Receiver Conveyor														
ST-1802	F-1801 D Kiln: Zones A, B, and C	None	0.287	1.26	1.37	6.00	0.164	0.717	0.0082	0.036	0.072	0.316	-----	-----

¹If this equipment is not vented through Ammonia Incinerator F-1804, then the permittee shall vent these emissions through an equivalent control device: Kiln A Ammonia Burner F-104; or Kiln B Ammonia Burner F-124; or Kiln C Ammonia Burner F-164.

- 6.1.7. The permittee shall vent all process-generated pollutants specified in 6.1.6. to the Ammonia Incinerator, F-1804, at all times, except when no process-generated emissions are occurring. In the event of an unavoidable malfunction such as a power outage, or during periods of routine on-line rodding out, process generated emissions to the atmosphere shall be minimized by the permittee taking the following actions:
- a. Continue to operate the Ammonia Incinerator, F-1804, if practical.
 - b. If the Ammonia Incinerator, F-1804, operating temperature falls below 950 °C or rises above 1,050 °C, then the permittee shall:
 - i. Halt urea feed to the Urea Kiln D, F-1801.
 - ii. Minimize process-generated emissions by switching quench sprays on the D-1801 Urea Scrubber to captive water.
- [45CSR13, R13-2050, A.2.]**
- 6.1.8. The maximum hourly amount of urea fed to Kiln D (F-1801) shall not exceed 6,200 pounds urea (dry weight basis) per hour from storage.
[45CSR13, R13-2050, A.3.]
- 6.1.9. The maximum hourly and annual plantwide production of cyanuric acid (CA) from Kilns A, B, C, and D shall not exceed 11,900 pounds per hour and 52,122 tons per year.
[45CSR13, R13-2050, A.4.]
- 6.1.10. The maximum natural gas usage for Kiln D shall not exceed 13,075 scf/hr and $1.145 * 10^8$ scf/yr.
[45CSR13, R13-2050, A.5.]
- 6.1.11. The permittee shall install, calibrate, and maintain a device to continuously monitor and record the operating temperature of Ammonia Incinerator F-1804. Except during periods of startup, shutdown, malfunctions or rodding out as allowed by 6.1.7., the operating temperature of Ammonia Incinerator F-1804 shall be maintained at the following conditions while process-generated emissions listed in 6.1.6. are occurring:
- a. The minimum operating temperature shall be 950 °C.
 - b. The maximum operating temperature shall be 1,050 °C.
- [45CSR13, R13-2050, A.6.]**
- 6.1.12. Ammonia Incinerator F-1804 shall maintain a minimum ammonia destruction efficiency of 98.7%.
[45CSR13, R13-2050, A.7.]

6.2. Monitoring Requirements

- 6.2.1. See condition 3.2.1. (*ST-130, ST-131, ST-171, ST-1806*)
- 6.2.2. Method 22 visible emission observations shall be conducted weekly during periods of normal operation for a sufficient time interval to determine if the unit has visible emissions. If the source has visible emissions, then a Method 9 evaluation shall be conducted within twenty four (24) hours unless the permittee can demonstrate a valid reason that the time frame should be extended. A Method 9 evaluation shall not be required if the condition resulting in the excess visible emissions is corrected within 24 hours and the units are operated at normal operating conditions. (*ST-102/ST-103, ST-122/ST-123, ST-162/ST-163, ST-1802*)

[45CSR§30-5.1.c.]

6.3. Recordkeeping Requirements

6.3.1. The permittee shall maintain records of the following:

- Kiln A (F-101) Daily urea feed rate (lb/day), hours of operation (hrs/day), hourly urea feed rate (lb/hr), daily natural gas usage (dscf/day), hourly natural gas usage (dscf/hr), and the minimum and maximum daily ammonia afterburner (F-104) operating temperatures (°C). If a different afterburner is being used to control emissions, indicate which afterburner is being used and the minimum and maximum daily operating temperatures (°C) of that afterburner.
- Kiln B (F-121) Daily urea feed rate (lb/day), hours of operation (hrs/day), hourly urea feed rate (lb/hr), daily natural gas usage (dscf/day), hourly natural gas usage (dscf/hr), and the minimum and maximum daily ammonia afterburner (F-124) operating temperatures (°C). If a different afterburner is being used to control emissions, indicate which afterburner is being used and the minimum and maximum daily operating temperatures (°C) of that afterburner.
- Kiln C (F-161) Daily urea feed rate (lb/day), hours of operation (hrs/day), hourly urea feed rate (lb/hr), daily natural gas usage (dscf/day), hourly natural gas usage (dscf/hr), and the minimum and maximum daily ammonia afterburner (F-184) operating temperatures (°C). If a different afterburner is being used to control emissions, indicate which afterburner is being used and the minimum and maximum daily operating temperatures (°C) of that afterburner.
- Kiln D (F-1801) Daily urea feed rate (lb/day), hours of operation (hrs/day), hourly urea feed rate (lb/hr), total monthly urea feed rate (lb/month), daily natural gas usage (dscf/day), hourly natural gas usage (dscf/hr), total monthly natural gas usage rate (dscf/month), twelve month rolling total urea feed rate (lb/year), twelve month rolling total natural gas usage rate (dscf/yr), and the minimum and maximum daily ammonia afterburner (F-1804) operating temperatures (°C). If a different afterburner is being used to control emissions, indicate which afterburner is being used and the minimum and maximum daily operating temperatures of that afterburner.
- Plantwide Daily plantwide purified CA production (lb/day), plantwide hours of operation (hrs/day), the plantwide purified CA production (lb/hr), monthly plantwide purified CA production, and twelve month rolling total plantwide purified CA production.

These records shall be maintained on site for a minimum of five (5) years and be made available to the Director or his/her duly authorized representative upon request. A completed "Certification of Data Accuracy Form" must appear on the reverse side of each record kept in accordance with R13-2050C.

[45CSR13, R13-2050, B.1. and Appendix B, Table 2, and 45CSR§30-5.1.c.]

- 6.3.2. The permittee shall maintain records of malfunctions with the F-1804 D Ammonia Afterburner. These records shall include the date and time of the occurrence and actions taken as a result. These records shall be maintained on site and shall be made available to the Director or his/her authorized representative upon request. [45CSR§30-5.1.c.]
- 6.3.3. Records of each visible emission observation and each 45CSR7A evaluation conducted in accordance with 6.2.1. shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the Method 22 observer.
[45CSR§30-5.1.c.]
- 6.3.4. Records of each visible emission observation and each Method 9 evaluation conducted in accordance with and 6.2.2. shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the

emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the Method 22 observer.

[45CSR§30-5.1.c.]

- 6.3.5. The permit shall maintain records of all occurrences of objectionable odors from any of the incinerators. In addition to the date and time of the occurrence, the record shall also include the suspected cause and any actions taken. These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR§30-5.1.c.]

7.0. CA Purification and Crude CA Rail Car Unloading
Emission Points: D-222, T-1007, Bld. 520.

7.1. Limits and Standards

7.1.1. The permittee shall meet the specific hourly and annual emissions limits, as well as the venting arrangements of Appendix A of R13-2050 as set forth in the following table. Any reference to an annual limit refers to any consecutive twelve (12) month period.

[45CSR13, R13-2050, A.1. and Appendix A]

Emission Point ID	Sources	Air Pollution Control Device	Sulfuric Acid	
			lb/hr	TPY
D-222	T-285 Digester or T-275 Spare Digester to T-203 or T-245 Flash Tanks (<i>High Pressure Flash Tanks</i>)	H-204 Digestion Barometric Condenser ¹	0.42	1.8
	H-204 Digestion Barometric Condenser T-230 Slurry Tank T-350 Acid Mix Tank T-233 Spare Digester	D-232 Venturi Water Scrubber ¹		
	D-232 Venturi Water Scrubber T-349 Cold Acid Purge Tank T-334 Recycle Acid Tank T-387 Clarifier Feed / Purge Acid Cooling Tank S-301, S-302, S-321, S-322., S-324, & S-343 Centrifuges ² T-1204 & T-234 Centrifuge Feed Tanks	D-222 Packed Bed Scrubber		
Tank Vent	T-1007 93% Sulfuric Acid Tank	None	NAP	5 x 10 ⁷

¹This piece of equipment is claimed as process equipment.

²S-301, S-302, S-321, S-322, S-324, and S-343 were changed to CE-301, CE-302, CE-321, CE-322, CE-324, and CE-343.

7.1.2. The maximum concentration of sulfuric acid mist from venturi water scrubber D-222 (emission point D-222) shall not exceed 70 mg/dscm as stated in Table 45-7B of 45CSR7.

[45CSR13, R13-2050, A.12. and 45CSR§7-4.2.]

7.1.3. The maximum concentration of sulfuric acid mist from the tank vent of 93% sulfuric acid tank T-1007 shall not exceed 35 mg/dscm as stated in Table 45-7B of 45CSR7.

[45CSR13, R13-2050, A.13. and 45CSR§7-4.2.]

7.1.4. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity.

[45CSR§7-3.1. and 45CSR13, R13-2050, B.5.]

7.1.5. The maximum annual quantity of crude cyanuric acid that shall be unloaded via hopper rail cars to the facility shall not exceed 25,000 tons per year.

[45CSR13, R13-2050, A.16., Equipment ID (Bld. 520)]

7.2. Monitoring Requirements

7.2.1. See condition 3.2.1.

7.2.2. The permittee shall conduct weekly inspections of the scrubbers (D-232 and D-222) during operation and shall conduct any necessary maintenance and repairs.

[45CSR§30-5.1.c.]

7.3. Recordkeeping Requirements

- 7.3.1. Records of each visible emission observation and each 45CSR7A evaluation conducted in accordance with 7.2.1. shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the Method 22 observer.
[45CSR§30-5.1.c.]
- 7.3.2. The permittee shall maintain monthly records and a twelve month rolling total of the sulfuric acid throughput for the 93% Sulfuric Acid Tank (T-1007). These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR§30-5.1.c.]
- 7.3.3. Records of the weekly inspections of the scrubbers (D-232 and D-222) shall be maintained which indicate the date and time, if the scrubbers were operating properly, based on best management practices, and any maintenance conducted. These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR§30-5.1.c.]
- 7.3.4. In order to determine compliance with 7.1.5. the unloading limits associated with crude cyanuric acid received, the permittee shall maintain records of daily, monthly and annual throughputs. Table 4 of Appendix B shall be used as a minimum requirement that satisfies this recordkeeping provision. Compliance with the annual throughput limit shall be demonstrated by maintaining a twelve month rolling total of raw material throughput.
[45CSR13, R13-2050, B.1. and Appendix B, Table 4]

8.0. Cyanuric Acid Granular; Emission Point: ST-9861

8.1. Limits and Standards

- 8.1.1. The permittee shall not exceed the maximum process weight rate of 1,000 pounds per hour.
[45CSR13, R13-894, A.1.]
- 8.1.2. Maximum air emission rates shall not exceed 0.32 pounds per hour of particulates. Compliance with this requirement assures compliance with the 45CSR§7- 4.1 limit of 1.2 lb/hr PM. (ST-9861)
[45CSR13, R13-894, A.2., 45CSR§7- 4.1]
- 8.1.3. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity. (ST-9861)
[45CSR§7-3.1.]

8.2. Monitoring Requirements

- 8.2.1. See condition 3.2.1.
- 8.2.2. The permittee shall conduct weekly inspections of the capture systems and baghouse (C-8107) during operation and shall promptly replace bags when necessary and conduct any necessary maintenance and repair. During these inspections, the permittee shall monitor the blower (B-9860) amp to ensure that it does not exceed 25.1.
[45CSR§30-5.1.c.]

8.3. Recordkeeping Requirements

- 8.3.1. Records of each visible emission observation and each 45CSR7A evaluation conducted in accordance with 8.2.1. shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the Method 22 observer.
[45CSR§30-5.1.c.]
- 8.3.2. Records of weekly inspections of the capture systems and baghouse shall be maintained which indicate the date and time, if the capture systems and baghouses were operating properly, if bag(s) were changed, and any maintenance conducted. These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR§30-5.1.c.]
- 8.3.3. Records of the blower (B-9860) amp readings shall be maintained on site and made available to the Director or his/her duly authorized representative upon request.
[45CSR§30-5.1.c.]
- 8.3.4. The permittee shall maintain daily records of cyanuric acid granular production and hours of operation. These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR§30-5.1.c.]

9.0. CDB-56, CDB-90, and Back End Waste Processes

Emission Points: ST-1601, ST-1001, ST-954, ST-958, ST-904, ST-978

9.1. Limits and Standards

9.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity. (*ST-1001, ST-954, ST-958, ST-904, ST-978*)

[45CSR§7-3.1. and 45CSR13, R13-1698, B.1]

9.1.2. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A of 45CSR7.

Emission Point	45CSR7 Hourly Particulate Allowable Emissions pph
ST-1001	6.45 (C-8060, C-8070) 4.91 (C-8310, C-8320) <u>See 9.1.6</u> for streamlined limit
ST-954	11.68
ST-958	13
ST-904	14.24 <u>See 9.1.5</u> for streamlined limit
ST-978	15.97 <u>See 9.1.7</u> For streamlined limit

Compliance with 45CSR§7-4.1. shall be demonstrated through compliance with the more stringent R13-1698 particulate emission limits for emission points ST-1001, ST-904, and ST-978. The streamlined requirements can be found within 9.1.5 for (ST-904 at 0.43 lbPM/hr), 9.1.6 for (ST-1001 at 0.86 lbPM/hr), and 9.1.7 for (ST-978 at 0.43 lbPM/hr). (*ST-1001, ST-954, ST-958, ST-904, ST-978*)

[45CSR§7-4.1. and 45CSR13, R13-1698, B.1]

9.1.3. Maximum production rate shall not exceed 7,300 pounds per hour. (*CDB-90 Process*)

[45CSR13, R13-1698, A.1.]

- 9.1.4. Maximum emissions to the atmosphere from emission point ST-1601 (**F-1601**) (the D-336A) process scrubber stack shall not exceed the following: (*ST-1601 -CDB-56, CDB-90, and Back End Waste Processes*)

Pollutant	pph
Chlorine	2.0
Nitrogen Trichloride	11.0
Sulfur Dioxide	0.04

[45CSR13, R13-1698, A.2.]

- 9.1.5. Maximum emissions of particulate matter to the atmosphere from emission point ST-904 (**F-904**) (the Y-970 bagging station and surge tank baghouse stack) shall not exceed 0.43 pounds per hour. (*ST-904 - CDB-90 Process*)
[45CSR13, R13-1698, A.3.]

- 9.1.6. Maximum emissions to the atmosphere from emission point ST-1001 (**F-1001**) (the F-970 fluid bed dryer and cagemill baghouse stack) shall not exceed the following:

Pollutant	pph
Particulate Matter	0.86
Sulfur Dioxide	0.002
Carbon Monoxide	0.124
Nitrogen Oxides	0.496
Volatile Organic Compounds	0.01

(*ST-1001 - CDB-56 and CDB-90 Processes*)

[45CSR13, R13-1698, A.4.]

- 9.1.7. Maximum emissions of particulate matter to the atmosphere from emission point ST-978 (**F-978**) (the SC-909 screen and granulator baghouse stack) shall not exceed 0.43 pounds per hour. (*ST - 978 - CDB-90 Process*)
[45CSR13, R13-1698, A.5.]

9.2. Monitoring Requirements

- 9.2.1. See condition 3.2.1.

- 9.2.2. The permittee shall conduct weekly inspections of the each baghouse (S-832, S-831, C-9540, C-9580, C-8070, C-8060, C-9040, and C-9780) and its associated capture system(s) during operation and shall promptly replace bags when necessary and conduct any necessary maintenance and repair. During these inspections, the permittee shall monitor the baghouse air flow rate (scfm). Typical and maximum air flow rates are provided as work practice standards as follows:

Baghouse	Service Description	Emission Point ID (Associated Process)	Maximum Air Flow Rate scfm	Typical Air Flow Rate
S-832 (C-8320)	Flash dryer baghouse N.	ST-1001 (CDB 56 Process)	15,000	10,000 to 11,000
S-831(C-8310)	Flash dryer baghouse S.	ST-1001 (CDB 56 Process)	15,000	10,000 to 11,000
C-9540	Granulator Compactor	ST-954 (CDB 56 Process)	5,000	1,890
C-9580	Screen Sizing	ST-958 (CDB 56 Process)	5,000	1,520
C-8070	Flash dryer baghouse	ST-1001 (CDB 90 Process)	10,000	4,500 to 7,500
C-8060	Flash dryer baghouse	ST-1001 (CDB 90 Process)	10,000	4,500 to 7,500
C-9040	Granulator Compactor	ST-904 (CDB 90 Process)	5,000	2,290
C-9780	Sizing Screens	ST-978 (CDB 90 Process)	5,000	3,290

[45CSR§30-5.1.c.]

- 9.2.3. The permittee shall conduct weekly inspections of the scrubber (D-336A) system during operation and shall conduct any necessary maintenance and repairs. During these inspections, the permittee shall monitor the circulation rate for the scrubber upper bed, circulation rate for the scrubber lower bed, the percent sodium hydroxide in the scrubber upper bed, and the percent sodium hydroxide in the scrubber lower bed. Typical and minimum rates are provided as follows:

Scrubber D-336A	Minimum	Typical
Upper Bed Circulation Rate	220 gpm	300 to 450 gpm
Lower Bed Circulation Rate	220 gpm	300 to 450 gpm
% NaOH in Upper Bed	3%	4.5 to 8%
% NaOH in Lower Bed	0.2%	0.2% to 0.9%

[45CSR§30-5.1.c.]

9.3. Recordkeeping Requirements

- 9.3.1. Records of each visible emission observation and each 45CSR7A evaluation conducted in accordance with 9.2.1. shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the Method 22 observer.
 [45CSR§30-5.1.c.]
- 9.3.2. The permittee shall maintain daily records of CDB-90, CDB-56 production, and hours of operation. These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.
 [45CSR§30-5.1.c.]
- 9.3.3. Records of weekly inspections of the capture systems and baghouse specified in 9.2.2 shall be maintained which indicate the date and time, if the capture systems and baghouses were operating properly, if bag(s) were changed,

and any maintenance conducted. These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR§30-5.1.c.]

9.3.4. Records of the air flow rate (scfm) of each baghouse specified in 9.2.2 shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR§30-5.1.c.]

9.3.5. Records of the weekly inspections of the scrubber specified in 9.2.3 shall be maintained which indicate the date and time, if the scrubber was operating properly, and any maintenance conducted. These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR§30-5.1.c.]

9.3.6. Records of the circulation rate for the scrubber upper bed, circulation rate for the scrubber lower bed, the percent sodium hydroxide in the scrubber upper bed, and the percent sodium hydroxide in the scrubber lower bed specified in 9.2.3 shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR§30-5.1.c.]

10.0. CDB-63 Process

Emission Point: ST-9912

10.1. Limits and Standards

- 10.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity.
[45CSR§7-3.1. and 45CSR13, R13-1724, B.3]
- 10.1.2. Reserved
- 10.1.3. The maximum feed rate of CDB 56 (Sodium dichloroisocyanurate, dihydrate) shall not exceed 1,375 pounds per hour.
[45CSR13, R13-1724, A.1.]
- 10.1.4. The maximum emission rate of particulate matter to the atmosphere from emission point ST-9912 (*F-9912*) (the baghouse vent stack following the DR-9904 Clearon® dryer) shall not exceed 0.984 pounds per hour. Compliance with this particulate matter requirement assures compliance with the 45CSR§7-4.1 weight rate limit of 1.65 lb/hr PM.
[45CSR13, R13-1724, A.2., 45CSR§7-4.1]

10.2. Monitoring Requirements

- 10.2.1. See condition 3.2.1.
- 10.2.2. The permittee shall conduct weekly inspections of the capture systems and baghouse (S-8104) during operation and shall promptly replace bags when necessary and conduct any necessary maintenance and repair. During these inspections, the permittee shall monitor blower (B-9911) amps to ensure that it does not exceed 36.1.
[45CSR§30-5.1.c.]

10.3. Recordkeeping Requirements

- 10.3.1. Records of each visible emission observation and each 45CSR7A evaluation conducted in accordance with 10.2.1. shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request. The visible emission observation records shall include, but not be limited to, the date, time, name of the emission unit, the applicable visible emissions requirements, the results of the observations, what action(s), if any, was/were taken, and the name of the Method 22 observer.
[45CSR§30-5.1.c.]
- 10.3.2. The permittee shall maintain daily records of the maximum hourly feed rate of CDB-56 to the CDB-63 process. These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR§30-5.1.c.]
- 10.3.3. Records of weekly inspections of the capture systems and baghouse shall be maintained which indicate the date and time, if the capture systems and baghouses were operating properly, if bag(s) were changed, and any maintenance

conducted. These records shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR§30-5.1.c.]

10.3.4. Records of the blower (B-9911) amp readings shall be maintained on site and shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR§30-5.1.c.]

11.0. Emergency Generators

Emission Point: EG-100

11.1. Limitations and Standards

11.1.1. Hourly and annual emissions from the EG-100 Emergency Generator shall not exceed the maximum limits given in the table below.

(For information, the emergency generator is equipped with a 1,340 HP Cummins diesel engine having a maximum heat input of approximately 10 mm Btu/hr and can burn approximately 73 gal/hr of #2 grade diesel fuel.)

Pollutant	Emission Factors ⁽¹⁾ (lb/hp-hr) (power output)	Uncontrolled Maximum Emissions		
		(lb/hr)	(lb/yr) ⁽²⁾	(TPY) ⁽²⁾
PM	0.0007	0.938	469.0	0.23
VOC	0.000705	0.945	472.4	0.24
CO	0.0055	7.37	3,685.0	1.84
NOx	0.024	32.16	16,080.0	8.04
SO ₂ ⁽³⁾	0.00809	10.84	5,420.3	2.71

(1) Emission factors from EPA's AP-42, Chapter 3.4 "Large Stationary Diesel and All Stationary Dual-fuel Engines," Table 3.4-1 "Gaseous Emission Factors for Large Stationary Diesel and All Stationary Dual-Fuel Engines."
 (2) Based on operating the EG-100 emergency generator 500 hours per year.
 (3) Clearon calculated the SO₂ emission factor based on 1% by weight sulfur in #2 grade diesel fuel.

[45CSR13, R13-2050, A.15.]

11.2. Monitoring Requirements

11.2.1. [Reserved]

11.3. Recordkeeping Requirements

11.3.1. For the purpose of determining compliance with the maximum emission rate limitations established for the emergency generator/diesel engine as set forth in 11.1.1., the permittee shall keep daily, monthly, and annual records of hours of operation, fuel usage, and any and all maintenance work performed on the generator/engine. Records shall be maintained on site for a period no less than five (5) years. Certified copies of these records shall be made available to the Secretary or his/her duly authorized representative upon request.

[45CSR13, R13-2050, B.2.]

Appendix B: Minimum Recordkeeping Requirements for R13-2050F
Clearon Corp., South Charleston Chlorinated Dry Bleach Plant

Tables 1- 4:

Appendix B, Table 2: Recordkeeping for Kiln D urea feed & natural gas use, plantwide CA production, and ammonia incinerator F-1804 operating temperatures.

Clearon Corp. - South Charleston Chlorinated Dry Bleach Plant - R13-2050F Recordkeeping for R13-2050F										
Month:			Year:							
Day	Urea Feed to Kiln D (F-1801)			Kiln D (F-1801) Natural Gas Use		Plantwide Purified CA Production			Ammonia Incinerator F-1804 Operating Temperatures	
	Daily Feedrate (lb/day)	Hours Operation (hr/day)	Hourly Feedrate (lb/hr)	Daily Use (dscf/day)	Hourly Use (dscf/hr)	Daily Production (lb/day)	Hours Operation (hr/day)	Hourly Production (lb/hr)	Minimum (°C)	Maximum (°C)
R13-2050F Permit Limits:			Confidential		13,075			Confidential	950	1050
1										
2										
3										
4										
5										
6										
7										
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Totals										
R13-2050F allows a maximum of 1.145×10^8 scf/yr natural gas use for Kiln D (F-1801); the maximum annual plantwide production of cyanuric acid production is confidential.										

