West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Eagle Natrium LLC

Natrium Plant

R30-05100002-2013

John A. Benedict
Director

Issued: [Draft/Proposed] • Effective: [Equals issue date plus two weeks]
Expiration: [5 years after issuance date] • Renewal Application Due: [6 months prior to expiration]

Permit Number: **R30-05100002-2013**

Permittee: **Eagle Natrium LLC**

Facility Name: **Natrium Plant**

Mailing Address: **P.O. Box 191, New Martinsville, WV 26155**

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:	New Martinsville, Marshall County, West Virginia
Mailing Address:	P.O. 191, New Martinsville, WV 26155
Telephone Number:	(304) 455-2200
Type of Business Entity:	Corporation
Facility Description:	Chemicals and Allied Products
SIC Codes:	Primary 2812; Secondary 2819
UTM Coordinates:	512.70 km Easting • 4,399.60 km Northing • Zone 17
Permit Writer:	Denton B. McDerment, 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.

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

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
4.0. Power Department – Boilers & Associated Equipment					
R011 (002)	S076	#3 Boiler	1942/1981	243 mmBTU/hr	Low NOx Burners (LNB); FF001 Fabric Filter
R015 (001)	S076	#4 Boiler	1952	496 mmBTU/hr	LNB; ES002 #4 ESP
R072 (003)	S482	#5 Boiler	1966	878 mmBTU/hr	LNB; ES001 #5 ESP
R097	S076	#6 Boiler	1993	181 mmBTU/hr	LNB CD006
5.0. Power Department – Coal Handling					
C035	Z009	Coal Crane	1942	250 tph	NA
C004	Z002	A Hopper (under Coal Pile)	1942	3,000 tons	Enclosed
C009	Z005	E Hopper (under Coal Pile)	1975	3,000 tons	Enclosed
C011	Z002	A Belt	1942	250 tph	CD002 Enclosure
C282	Z005	E Belt	1975	250 tph	CD005 Enclosure
C005	Z001	Coal Crusher	1942	250 tph	CD001 Enclosure
C014	Z004; Z007	D Belt	1942	250 tph	CD004 Enclosure
PI001	Z007	Coal Stockpile	1942	50,000 tons	NA
C012	Z003	B Belt	1942	250 tph	CD003 Enclosure
C013	Z003	C Belt	1942	250 tph	CD003 Enclosure
C003	N/A	Coal Tripper	1942	250 tph	Enclosed

[1] Year Installed means commenced construction as defined in 40 C.F.R. 60.
[2] Control Device/Control System abbreviations: ESP=Electrostatic Precipitators, LNB=Low NO_x Burners.

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
5.0. Power Department – Flyash Handling System					
	E001	Flyash Handling System	---	----	CY001 Primary Collector; FF004 Secondary Collector
CY001	E001; E003	Primary Collector	----	----	FF004 Secondary Collector; FF003 Flyash Silo Filter
FF004	E001; E003	Secondary Collector	----	----	NA; FF003 Flyash Silo Filter
B001	E003; Z006	Flyash Silo	1975	31.72 tph	FF003 Flyash Silo Filter; CD007 Dust Conditioner (River Water)
B002	Z006	Hydrobin A & B	1975	225 tons each	Water Spray
LU001	Z006	Truck Loading	1975	----	CD007 Dust Conditioner (River Water)
PI002	Z008	Flyash Landfill	1952	----	Water Spray
6.0. Brine Department – Brine					
V273	E418	Zero Discharge Collection Tank	1992	0.022 tph	FL002 Flare
SP008		Rock Separator	1992	~ 500 gal	
SP007	E417	Gas Separator	1989	0.045 tph	FL003 Flare
V272		Raw Brine Storage	1948	1700 gpm	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
TW025	E025	Drip Gas Collection Tank (for #5 Brine Well)	1997	800 gal	NA
TW010	E026	Drip Gas Collection Tank (for #8 Brine Well)	1997	800 gal	NA
6.0. Brine Department – Sewage Treatment System					
WW001	None	Package Sewage Treatment Plant	1976	8,760 hr/yr	NA
7.0. HCl Dept.					
V187	E022	#1 HCl Tank	---	19,400 gal	SC022
V188	E022	#2 HCl Tank	---	19,400 gal	SC022
V189	E023	#3 HCl Tank	---	127,000 gal	SC023
V190	E023	#4 HCl Tank	---	206,000 gal	SC023
V122	E023	#5 HCl Tank	2009	112,850 gal	SC023
SC022	E022	#1 & #2 HCl Tank Scrubber	---	---	NA
SC023	E023	#3, #4, & #5 HCl Tank Scrubber	---	---	NA
SU004	E994	#1 HCl Synthesis Unit	2008	227 tpd	SC159
SC159	E994	#1 Tails Tower	2008	--	NA
V998	NA	#1 HCl Catch Tank	2008	472 gal	NA
V997	E995	#1 HCl Transfer Tank	2008	528 gal	SC160
SC160	E995	#1 HCl Transfer Tank Scrubber	2008	--	NA
SU005	E996	#2 HCl Synthesis Unit	2009	227 tpd	SC161
SC161	E996	#2 Tails Tower	2009	--	NA
V999	NA	#2 HCl Catch Tank	2009	528 gal	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
SU006	E1005	#3 HCl Synthesis Unit	2013	280 tpd	SC163
SC163	E1005	#3 Tails Tower	2013		
V1036	E995	#2 HCl Transfer Tank	2013	528 gal	SC160
7.0. HCl Dept. – Loading					
LU053	Z053 and E098	Rail Transfer	---	---	SC018 (for HCl only)
LU054	Z054 and E023	Tank Truck Loading	---	---	SC023 (for HCl only)
SC018	E098	HCl Rail Car Scrubber	---	---	NA
8.0. Chlorine Dept. – Diaphragm Cells Chlorine Production					
CE002	Z017 E360	#6 Circuit – Chlorine Fugitives #6 Circuit – Emergency Chlorine Scrubbing	1955	194	NA SC009 Caustic Scrubber
CE003	Z017 E102	#8 Circuit – Chlorine Fugitives #8 Circuit – Emergency Chlorine Scrubbing	1984	606	NA SC008 Caustic Scrubber
8.0. Chlorine Dept. – Mercury Cells Chlorine Production					
CE004	Z017 E360 Z018	#7 Circuit – Chlorine Fugitives #7 Circuit – Emergency Chlorine Scrubbing #7 Circuit Mercury Fugitives	1957	208	NA SC009 Caustic Scrubber NA
8.0. Chlorine Dept. – Mercury Brine Treatment					
V889	E037	HCl Tank	1958/2001	11,500 gal	SC007 Scrubber

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
8.0. Chlorine Dept. – Diaphragm Circuit Hydrogen Processing					
CE002	E008 E054 E024	#6 Circuit - Cell Room Seal (4) #6 Circuit – Atm Seal #6 Circuit – Stack (1)	-----	-----	NA NA NA
CE003	E052, E035 E042, E019 E103, E104	#8 Circuit - Cell Room Seal (2) #8 Circuit – Atm Seals (2) #8 Circuit –Stacks (2)	-----	-----	NA NA NA
CE002, CE003, CE004	E340, E341 E124	Clean Out Vents H_2 Product Vent	-----	-----	NA CA001 or CA002 Carbon Absorbers
8.0. Chlorine Dept. – No. 6 Circuit Diaphragm Cell Renewal					
SL014	E056	Fluffing and Glove Box	-----	-----	FF008 Filter
TP061	E036	Slurry Vacuum Tank	------	------	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
8.0. Chlorine Dept. – Circuit #7 Mercury Hydrogen Processing					
CE004	E034 E032 E039	#7 Circuit - Cell Room Seal #7 Circuit - Atmospheric Seal #7 Circuit - Stack	-----	-----	NA NA CS020 Contact Cooler, SC005 Brine Scrubber, and SC006 Caustic Scrubber
8.0. Chlorine Dept. – Mercury Cell End Boxes					
CE004	E320 E038	#7 Circuit Cell Inlet Boxes #7 Circuit Cell End Boxes			CS025, CS026, and CS027 Water Coolers; A001 and A002 Carbon Absorbers NA
8.0. Chlorine Dept. – Mercury Collection					
T027 T095	E041 E043	Collection Tank #1 Collection Tank #2	-----	-----	NA NA
8.0. Chlorine Dept. – Chlorine Processing					
T035	E105	Sulfuric Acid Tank #1	-----	14,500 gal	NA
T036	E106	Sulfuric Acid Tank #2	-----	14,500 gal	NA
T037	E107	Sulfuric Acid Tank #3	-----	9,400 gal	NA
T038	E108	Sulfuric Acid Tank #4	-----	1,850 gal	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
T039	E109	Sulfuric Acid Tank #5	-----	7,300 gal	NA
8.0. Chlorine Dept. – Sulfur Chloride					
---	Powerhouse Stack #1 S076	Tail Gas, Sniff Gas, High Pressure Blowdown	-----	-----	Afterscrubber SC010
R881	E101	Boiler	1957	1.25 MM Btu/hr	NA
LK002	Z015	$MeCl_2$ Fugitives	1979	-----	NA
8.0. Chlorine Dept. – No. 8 Diaphragm Cell Renewal					
T078	E044	Vacuum Tank	-----	-----	NA
8.0. Chlorine Dept. – No. 5 Diaphragm Cell Renewal					
TP057	E045	Depositing Vacuum Tank	1987	10,000 gal	NA
9.0. Cal-Hypo Department – Wetside					
B012	E004	Lime Silo #1	1983	15,600 ft^3	FF002 Fabric Filter
B014	E027	Lime Silo #2	1983	15,600 ft^3	FF007 Fabric Filter
9.0. Cal-Hypo Department – Dryside					
FN003	S001	Stack Blower	1983	52,000 ACFM	NA
VV001	S001	Vacuum Vents on Wetside Equipment	1983	3,500 CFM @70 °F	SC001, SC002 Caustic Scrubbers
FF005	S001	Baghouse	1986	52,000 ACFM	SC001, SC002 Caustic Scrubbers
KO002	S001	Knockout Tank	1984	52,000 ACFM	SC001, SC002 Caustic Scrubbers
CY003	S001	Secondary Cyclone	1983	37,800 ACFM	SC001, SC002 Caustic Scrubbers

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
CD008	S001	Micro Venturi	1984	N/A	SC001, SC002 Caustic Scrubbers
CY002	S001	Primary Cyclone	1983	37,800 ACFM 9,700 lb/hr	SC001, SC002 Caustic Scrubbers
SP006	S001	Spinner Separator	1983	14,300 lb/hr	SC001, SC002 Caustic Scrubbers
B005	E005	Dry Salt Bin (vents inside bldg)	1983	41.5 Ton	FF012 Filter
9.0. Cal-Hypo Department – Repackaging & Cooling Tower					
PA002	E031	Pail Packaging Unit	1983	3,000 lbs	FF006 Filter
CT002	Z013	Cooling Tower	1983	2,000 GPM 21,000 Gal	NA
9.0. Cal-Hypo Department – NaHS Storage Tanks and Transfer Operations					
V448	E993	#3 NaHS Storage Tank	1962	30,000 gal	SC073 NaHS Storage Tank Vent Scrubber
V449	E993	#4 NaHS Storage Tank	1962	30,000 gal	SC073 NaHS Storage Tank Vent Scrubber
V994	E993	#6 NaHS Storage Tank	1976	120,000 gal	SC073 NaHS Storage Tank Vent Scrubber
V1035	E993	#7 NaHS Storage Tank	1980	200,000 gal	SC073 NaHS Storage Tank Vent Scrubber
V3126	E993	#8 NaHS Storage Tank	1992	204,750 gal	SC073 NaHS Storage Tank Vent Scrubber
LU160/ LU174	E993	NaHS Tank Car/ Tank Truck Transfer			SC073 NaHS Storage Tank Vent Scrubber
10.0. Caustic Department					
CT003	Z016	Cooling Tower	1969	120,000 gal	NA
V023	E110	Acid Tank for Ph Control	1995	14,528 gal	SC019 Scrubber

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
V024	E110	Acid Tank for Ph Control	1995	14,528 gal	SC019 Scrubber
V706		Ammonia Storage Tank	1946	18,000 gal	NA
V042	E998	Metal Cells Spent Acid Tank	2011 (new)	7,350 gal	SC162 Scrubber
V027	E998	Metal Cells Acid Tank	2011 (modified)	1,600 gal	SC162 Scrubber
SC162	E998	Metal Cells Tanks Scrubber	2011 (new)	99.9% removal efficiency	NA
HE022; HE023	E049	Preheaters	1988	450 gal	Seal Pot (vents only under upset conditions)
HE025	E050	Heater	1988	180 gal	Seal Pot (vents only under upset conditions)
CL011	E051	NH_3 Absorber	1997	180 gal	Seal Pot (vents only under upset conditions)
11.0. PELS™ Department					
CN002	E624	Anhydrous Concentrator	1975	210 tpd	DE001 Mesh Pad
V003	E963	Molten Salt Storage Tank	1975	5,000 gal	NA
R900	E629	Molten Salt Furnace	1975	15 mmbtu/hr	Elevated Stack
CT001	Z010	PELS Cooling Tower	1968	3,000 gpm	NA
TR062	E302	Prill Tower	1975	210 tpd	SC068 Scrubber
LU002	E070	Product Packing and Loading	1975	210 tpd	SC069 Scrubber

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
12.0. Plant Paint Spray Booth					
PB001	E020, E021	Paint Spray Booth			FF013, FF014 Filter
13.0. Emergency Generators and Pumps					
G001	E1000	Area 10 Emergency Generator	1984	235 horsepower	NA
G002	E1001	East Area Emergency Generator	1984	235 horsepower	NA
G003	E1002	West Chlorine Dry Air Emergency Generator	1999	250 horsepower	NA
G004	E1003	Cal-Hypo Fire Water Pump	1981	235 horsepower	NA
G005	E1004	HCl Fire Water Pump	2002	235 horsepower	NA

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
R13-1664	12/20/1993
R13-1527	12/15/1992
R13-1637A	11/17/2004
R13-2046F	TBD
R13-2886	10/28/2011
R14-027B	4/23/2008

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 monthly 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
CBI	Confidential Business Information
CEM	Continuous Emission Monitor
CES	Certified Emission Statement
C.F.R. *or* CFR	Code of Federal Regulations
CO	Carbon Monoxide
C.S.R. *or* CSR	Codes of State Rules
DAQ	Division of Air Quality
DEP	Department of Environmental Protection
FOIA	Freedom of Information Act
HAP	Hazardous Air Pollutant
HON	Hazardous Organic NESHAP
HP	Horsepower
lbs/hr *or* lb/hr	Pounds per Hour
LDAR	Leak Detection and Repair
m	Thousand
MACT	Maximum Achievable Control Technology
mm	Million
mmBtu/hr	Million British Thermal Units per Hour
mmft^3/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour
NA *or* N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAPS	National Emissions Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10μm in diameter
pph	Pounds per Hour
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VEE	Visual Emissions Evaluation
VOC	Volatile Organic Compounds

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 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). A copy of this notice is required to be sent to the USEPA, the Division of Waste Management and the Bureau for Public Health – Environmental Health.
[40 C.F.R. 61 and 45CSR34]

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. The Company agrees that at all times, including periods of source start-up, shutdown, and malfunction, that it will, to the extent possible, maintain and operate all sources of sulfur dioxide emissions, including associated air pollution equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
[CO-SIP-C-2003-27 § IV.2.]

3.1.10. **CAIR NO_x Ozone Season Trading Program (#3 Boiler, #4 Boiler, #5 Boiler).** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (See Appendix C) and the CAIR permit requirements set forth in 45CSR40 for each CAIR NO_x Ozone Season source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.
[45CSR§§40-6.1.b. and 20.1.]

a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§40-2 and, upon recordation by the Administrator under 45CSR§40-43.3.c, sections 51 through 57, or 60 through 62 of 45CSR40, every allocation transfer or deduction of a CAIR NO_x Ozone Season allowance to or from the compliance account of the CAIR NO_x Ozone Season source covered by the permit.
[45CSR§40-23.2.]

b. Except as provided in 45CSR§40-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.
[45CSR§40-24.1.]

3.1.11. **Fugitive Haulroad Emissions.** 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. **Commencement of operation** – The permittee shall conduct the monitoring required under 40 C.F.R. Part 64 upon issuance of this permit that includes such monitoring.
[40 C.F.R. §§64.7(a) and 64.6(c)(3); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160, ES001, ES002, FF001)]

3.2.2. **Proper Maintenance** – At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 C.F.R. §§64.7(b) and 64.6(c)(3); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160, ES001, ES002, FF001)]

3.2.3. **Continued Operation** – Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 C.F.R. Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 C.F.R. §§64.7(c) and 64.6(c)(3); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160, ES001, ES002, FF001)]

3.2.4. **Documentation of Need for Improved Monitoring** – After approval of monitoring under 40 C.F.R. Part 64, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 C.F.R. §§64.7(e) and 64.6(c)(3); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160, ES001, ES002, FF001)]

3.2.5. **Quality Improvement Plan (QIP) –** Based on the results of a determination made under §64.7(d)(2) (Response to excursions or exceedances, permit condition 3.4.4.(2)), the Administrator or the Director may require the permittee to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 C.F.R. §§ 64.8(b) through (e). Refer to permit condition 3.5.10.(2)(iii) for the reporting required when a QIP is implemented.
[40 C.F.R. §§64.8 and 64.6(c)(3); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160, ES001, ES002, FF001)]

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, if applicable, 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.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code § 22-5-4(a)(14)-(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.]
[45CSR13, R13-2046, 4.4.1.] *(HCl Dept. – Permit Section 7.0)*
[45CSR13, R13-2886, 4.4.1.] *(Caustic Dept. – Tanks V042 and V027; and Scrubber SC162)*

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. **Response to Excursions or Exceedances**

(1) Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 C.F.R. §§64.7(d) and 64.6(c)(3); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160, ES001, ES002, FF001)]

3.4.5. **General recordkeeping requirements for 40 C.F.R. 64 (CAM).** The permittee shall comply with the recordkeeping requirements specified in permit conditions 3.4.1. and 3.4.2. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. §64.8 (permit condition 3.2.5.) and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
[40 C.F.R. §§64.9(b) and 64.6(c)(3); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160, ES001, ES002, FF001)]

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. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, 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, 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 annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. 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 or before September 15 for the reporting period January 1 to June 30 and on or before 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.]

3.5.10. **General reporting requirements for 40 C.F.R. 64 (CAM)**

(1) On and after the date specified in 40 C.F.R. §64.7(a) by which the permittee must use monitoring that meets the requirements of 40 C.F.R. 64, the permittee shall submit monitoring reports to the DAQ in accordance with permit condition 3.5.6.

(2) A report for monitoring under 40 C.F.R. 64 shall include, at a minimum, the information required under permit condition 3.5.8. and the following information, as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(iii) A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 C.F.R. §§64.9(a) and 64.6(c)(3); 45CSR§30-5.1.c.; (SC018, SC022, SC023, SC160, ES001, ES002, FF001)]

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. **45CSR3** – *To Prevent and Control Air Pollution from the Operation of Hot Mix Asphalt Plants*: This regulation is not applicable to this facility because the facility is not a hot mix asphalt plant.

b. **45CSR5** – *To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas*: The coal handling facilities are subject to 45CSR2 in lieu of 45CSR5.

c. **45CSR17** – *To Prevent and Control Particulate Air Matter Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter*: The facility is subject to 45CSR2 and 45CSR7 in lieu of 45CSR17.

d. **45CSR21** – *Regulation to Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*: This regulation is not applicable to this facility because the facility is not located in Putnam, Kanawha, Cabell, Wayne, or Wood counties.

e. **45CSR29** – *Rule Requiring the Submission of Emission Statements for Volatile Organic Compound Emissions and Oxides of Nitrogen Emissions*: This regulation is not applicable to this facility because the facility is not located in Putnam, Kanawha, Cabell, Wayne, Wood, or Greenbrier counties.

f. **40 C.F.R. 60, Subpart D** – *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971:* The maximum design heat input of coal Boiler No. 3 is 243 mmBtu/hr which is less than the applicable threshold of 250 mmBtu/hr. Boiler No. 3 was constructed before August 17, 1971 and was modified in 1980 from a stoker feed system to a pulverized coal feed system. The maximum design heat inputs of coal Boilers No. 4 and 5 are 496 and 878 mmBtu/hr, respectively, which exceed this subpart's applicability threshold of 250 mmBtu/hr. However, they are not subject to this subpart because they were constructed prior to August 17, 1971 and have not been modified since. The maximum design heat input of Boiler No. 6 is 181 mmBtu/hr which is less than the applicable threshold of 250 mmBtu/hr.

g. **40 C.F.R. 60, Subpart Da** – *Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978:* Applies to Electric Utility Steam Generating Units only. The maximum design heat input for Boiler No. 3 is 243 mmBtu/hr which is less than the applicable threshold of 250 mmBtu/hr. Boilers No. 4 and 5 were constructed prior to September 18, 1978 and have not been modified since. The maximum design heat input of Boiler No. 6 is 181 mmBtu/hr which is less than the applicable threshold of 250 mmBtu/hr.

h. **40 C.F.R. 60, Subpart Db** – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units:* Boilers No. 3, 4, 5, and 6 are not subject to this subpart for the following reasons. The maximum design heat input of coal Boiler No. 3 is 243 mmBtu/hr which exceeds the applicable threshold of 100 mmBtu/hr. However, it is not subject to this subpart because it was constructed before June 19, 1984. The modification of this boiler in 1980 also predates the effective date of June 19, 1984. The maximum design heat inputs of coal Boilers No. 4 and 5 are 496 and 878 mmBtu/hr, respectively, which exceed this subpart's applicability threshold of 100 mmBtu/hr. However, they are not subject to this subpart because they were constructed prior to June 19, 1984 and have not been modified since. Boiler No. 6 was constructed in 1993 which is after the effective date of June 19, 1984, and its maximum design heat input is 181 mmBtu/hr which exceeds the applicable threshold of 100 mm Btu/hr, but because Boiler No. 6 burns primarily hydrogen gas (> 90%) and only occasionally natural gas (for flame stabilization purposes during start-up and shut-down, and for load stabilization purposes during times of inconsistent hydrogen feed), the fuel is not considered to be a fossil fuel and Boiler No. 6 is exempt from 40 C.F.R. 60 Subpart Db.

i. **40 C.F.R. 60, Subpart Dc** – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units:* None of the boilers have a thermal rating within the applicability range of 10 to 100 mmBtu/hr.

j. **40 C.F.R. 60, Subpart Y** – *Standards of Performance for Coal Preparation Plants:* The coal handling facilities were constructed prior to October 24, 1974. In 1975, E belt and E hopper were installed. However, this installation did not result in an increase in emissions so the installation would not be considered a modification under this subpart.

k. **40 C.F.R. 60, Subpart VV** – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry:* Hydrochloric Acid (HCl) is the only remaining Hazardous Air Pollutant emitted from the former MCB Process Area (re-named the HCl Production Area). HCl is not on the list of chemicals to which this Subpart applies (40 CFR §60.489); therefore references to this Subpart have been removed.

l. **40 C.F.R. 60, Subpart NNN** – *Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.* A continuous flow to the atmosphere from a pressure relief valve on the Benzene Emissions/Vent Scrubber (emission point 017) originally triggered Subpart NNN. A process change involving the replacement of a nitrogen regulator with a new, improved regulator results in a good seal for the pressure relief valve and eliminated the continuous flow through the pressure relief valve (i.e., emissions only occur during startups, shutdowns, and process upsets). According to 40 C.F.R.§60.661, relief valve discharges are exempted from complying with the requirements of Subpart NNN. Eagle Natrium's request to modify R13-2046R to remove the compliance requirement for Subpart NNN (B.6. in the permit) and remove emission point E017 and its limits in Section A of the permit was granted on September 22, 1997 with the issuance of R13-2046R2.

m. **40 C.F.R. 61, Subpart J** – *National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene*. This regulation is not applicable to the facility because benzene no longer utilized at this facility.

n. **40 C.F.R. 61, Subpart V** – *National Emission Standard for Equipment Leaks (Fugitive Emission Sources).* No equipment covered by this Subpart is in use at this facility.

o. **40 C.F.R. Part 61, Subpart Y** – *National Emission Standard for Benzene Emissions From Benzene Storage Vessels*. This regulation is not applicable to the facility because benzene is no longer utilized at this facility.

p. **40 C.F.R. Part 61, Subpart FF** – *National Emission Standard for Benzene Waste Operations*. This regulation is not applicable to the facility because benzene is no longer utilized at this facility.

q. **40 C.F.R. 63, Subpart Q** – *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers:* This regulation is not applicable to the facility because no chromium-based water treatment chemicals are used to condition the recirculation water in the cooling tower.

r. The facility is not subject to Title IV of the Clean Air Act, therefore requirements of Section 2.25., "Acid Deposition Control" are not applicable and the permittee is not required to certify compliance with them.

s. **40 C.F.R. Part 63, Subpart NNNNN** – *National Emission Standards for Hazardous Air Pollutants for Hydrochloric Acid Production*. The permittee does not have a hydrochloric acid production area. However, #1 and #2 HCl Synthesis Unit (SU004) and the associated equipment installed for the unit are not subject to the MACT. This process is exempted in 40 CFR §63.8985(d) as it produces HCl through the Direct synthesis of hydrogen and chlorine and is part of a chlor-alkali facility.

4.0. Requirements for Power Department Boilers & Associated Equipment, Emission Points: S076 – Boilers No. 3, 4, & 6; and S482 – Boiler No. 5

4.1. Limitations and Standards

4.1.1. Visible emissions from the stacks (S076, S482) shall not exceed ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1.; 45CSR13, R13-1637, 4.1.5.; 45CSR14, R14-027, B.1.]

4.1.2. The visible emission standards in 4.1.1. shall apply at all times except in periods of start-ups, shutdowns, and malfunctions.
[45CSR§2-9.1.; 45CSR14, R14-027, B.1.]

4.1.3. The heat input administered to the No. 6 Boiler shall be limited to a maximum of 181 x 10^6 Btu per hour.
[45CSR13, R13-1637, 4.1.1.]

4.1.4. Emissions of PM shall not exceed the following limitations:

Boiler No.	PM (lb/hr)
3	10.27 (0.043 lb PM/MM Btu)
4	44.6
5	79

Compliance with these streamlined PM weight emission limits assures compliance with 45CSR§2-4.1.b.
[45CSR14, R14-027, A.4. & B.1.; 45CSR§2-4.1.b.]

4.1.5. Emissions from the hydrogen-fired boiler, Boiler No. 6, to existing stack S076 shall not exceed the following limitations:

Pollutant	Emissions	
	Hourly (lb/hr)	Annual* (TPY)
Particulate Matter (PM)	0.2	0.5
Sulfur Dioxide (SO_2)	0.1	0.1
Nitrogen Oxide (NO_x)	10.6	46.2
Carbon Monoxide (CO)	1.3	5.6
Volatile Organic Compounds (VOC)	0.1	0.4

Compliance with this streamlined PM weight emission limit assures compliance with less stringent 45CSR§2-4.1.b. Compliance with this streamlined SO_2 limit assures compliance with 45CSR§10-3.1e.

** "Annual" in this case means a 12-month rolling total.*

[45CSR13, R13-1637, 4.1.4.; 45CSR§2-4.1.b.; 45CSR§10-3.1.e.]

4.1.6. Emissions of sulfur dioxide (SO_2) shall not exceed the following limitations:

Boiler No.	Maximum Design Heat Input (MM Btu/hr)	SO_2 (lb/hr)
3	243	750
4	496	1538
5	878	1479

Compliance with these streamlined SO_2 limits assures compliance with less-stringent 45CSR§10-3.1.e.
[45CSR14, R14-027, A.1.; 45CSR§10-3.1.e.]]

4.1.7. Total SO_2 emissions from Stack No.1 (S076), serving Boilers No. 3 and 4, shall not exceed 2288 lb/hr (750 lb/hr + 1538 lb/hr).
Compliance with this streamlined SO_2 limit assures compliance with less-stringent 45CSR§10-3.1.e.
[45CSR14, R14-027, A.1., A.2., A.5., & A.6.; 45CSR§10-3.1.e.]

4.1.8. Total combined SO_2 emissions from Boiler Nos. 3, 4, and 5 shall not exceed 3,767 lb/hr.
Compliance with this streamlined SO_2 limit assures compliance with less-stringent 45CSR§10-3.1.e.
[45CSR14, R14-027, A.3.; 45CSR§10-3.1.e.]

4.1.9. Low NO_x burners shall be maintained and operated so as to reduce the formation of NO_x from Boiler No. 3.
[45CSR14, R14-027, A.7.]

4.1.10. Emissions of NO_x from Boiler No. 3 shall not exceed 0.75 lb-NO_x/MMBtu as determined by a daily weighted average. For the purposes of this permit, "daily weighted average" shall mean the average emission rate as averaged over a calendar day. **[45CSR14, R14-027, A.8.]**

4.1.11. Hydrogen gas (a byproduct of the plant's chlorine product process) shall be used as No.6 Boiler's primary fuel. The hydrogen gas shall have a maximum heat content of 320.9 BTU/ft^3. Hydrogen gas consumption shall not exceed 3,112 lb/hr and 27.3 x 10^6 lb/yr. **[45CSR13, R13-1637, 4.1.2.]**

4.1.12. Natural gas shall be used as No. 6 Boiler's secondary fuel, for flame stabilization purposes during start-up and shut-down, and for load stabilization purposes during time of inconsistent hydrogen feed. The natural gas shall have an average rating of 906 BTU/ft^3. Natural gas consumption shall not exceed a maximum of 15,080 ft^3/hr (724 lb/hr) and 132.1 x 10^6 ft^3/yr (6.34 x 10^6 lb/yr). **[45CSR13, R13-1637, 4.1.3.]**

4.1.13. a. **40 C.F.R. 63, Subpart DDDDD.** The coal-fired Boilers No. 3, 4, 5, and hydrogen-fired Boiler No. 6 shall comply with all applicable requirements for existing affected sources, pursuant to 40 C.F.R. 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" no later than the existing source compliance date of January 31, 2016.
[40 C.F.R. §63.7495(b); 45CSR34; 45CSR13, R13-1637, 4.1.6.]

b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 C.F.R. 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 C.F.R. §63.7545(e).

If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

[40 C.F.R. §63.7545(e); 45CSR34; 45CSR§30-6.5.b.]

4.2. Monitoring Requirements

4.2.1. Compliance with the visible emissions and PM mass rate (condition 4.1.4.) requirements for Boilers No. 3, 4, and 5 shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 in conjunction with monitoring of PM control equipment and periodic parametric monitoring as described in the approved monitoring plan for PM (45CSR2). The monitoring plan is attached in Appendix A of this permit.
[45CSR§§2-3.2., 8.1.a., and 8.2.; 45CSR§§2A-5.1a. and 6.; 45CSR14, R14-027, B.1.; 45CSR2 and 45CSR10 Monitoring Plan – I.A., I.B., and I.C.; 40 C.F.R. §§ 64.3(a) and (b); 45CSR§30-5.1.c.]

4.2.2. As described in the approved monitoring plan for PM (45CSR2), the permittee shall monitor the amount of hydrogen and natural gas burned in Boiler No. 6 on a monthly basis.
[45CSR§§2-3.2., 8.1.a., and 8.2.; 45CSR§§2A-5.1a., 6.1., and 6.3.; 45CSR2 and 45CSR10 Monitoring Plan – I.D.]

4.2.3. As described in the approved monitoring plan for SO_2 (45CSR10), compliance with the SO_2 emissions requirements for Boilers No. 3, 4, and 5 shall be determined by using continuous emission monitoring systems (CEMS). The CEMS for Boilers No. 3 and 4, and Boiler No. 5 shall be installed, certified, operated, and maintained as specified in 40 C.F.R. Part 60, Appendix B, Performance Specification 2 (PS2) and shall follow the quality assurance requirements set forth in 40 C.F.R. Part 60, Appendix F. The monitoring plan is attached in Appendix A of this permit.
[**45CSR§§10-8.2.c.1. and 8.2.c.1.A.; 45CSR2 and 45CSR10 Monitoring Plan – II.A.]**

4.2.4. As described in the approved monitoring plan for SO_2 (45CSR10), the permittee shall monitor the amount of hydrogen and natural gas burned in Boiler No. 6 on a monthly basis
[45CSR§10-8.2.c. and 8.2.c.3.; 45CSR2 and 45CSR10 Monitoring Plan – II.B.]

4.2.5. For Boiler No. 6, compliance with the NO_x, CO, SO_2, PM, and VOC emission limits as set forth in Section 4.1.5. of this permit shall be determined by compliance with the hydrogen and natural gas fuel usage limits as set forth in Sections 4.1.11. and 4.1.12. of this permit.
[45CSR13, R13-1637, 4.4.2.]

4.2.6. Compliance with the NO_x emission limit for Boiler No. 3 as specified in Section 4.1.10. of this permit shall be determined by the use of a Continuous Emission Monitoring System(CEMS). The CEMS shall be operated, maintained and certified as accurate by a RATA under the applicable requirements of 40 CFR 75 Subpart C. CEMS RATA test results will be submitted to the Director as part of NO_x SIP requirements.
[45CSR14, R14-027, A.9.]

4.2.7. For the purpose of determining compliance with the fuel consumption limits as set forth in Sections 4.1.11. and 4.1.12. of this permit, the permitted facility shall monitor the hydrogen and natural gas consumption rates associated with the routine operation of the No. 6 Boiler [R097].
[45CSR13, R13-1637, 4.2.1.]

4.2.8. Compliance with the Boiler No.5 SO_2 emission limits as specified in Section 4.1.6 of this permit shall be determined by the use of a Continuous Emission Monitoring System (CEMS). The CEMS shall be installed, operated, maintained and certified as accurate under the applicable requirements of 40 CFR 60. **[45CSR14, R14-027, A.11.]**

4.2.9. Monitoring of Indicator Ranges under 40 C.F.R. Part 64 for R072 #5 Boiler & ES001 Electrostatic Precipitator.

(a) Number of ESP Modules in Service – A minimum of six (6) of the sixteen (16) modules must be in service while the boiler is operating, as specified in the 45CSR2 monitoring plan (Appendix A). The number of modules in service shall be monitored and recorded at least once per 8-hour shift while the boiler is operating.

(b) ESP primary AC voltage – The ESP primary AC voltage must be at least 50 volts as measured on each of the eight (8) volt meters on #5 Boiler's ESP ES001. The permittee shall monitor and record at least four (4) data values equally spaced over each hour through the Foxboro process control system (or equivalent data collection system). As a backup, data shall be manually logged if Foxboro is unavailable. Data shall be averaged daily each calendar day the boiler is operating.

If new equipment will be installed to record local readings into Foxboro, then such equipment shall be installed, tested, or final verification shall be made, consistent with 40 C.F.R. §64.3(b)(2), within 180 days after the issuance date of this renewal operating permit.

(c) Opacity – The opacity range is 0 to 10 percent. Data shall be monitored and recorded in accordance with the 45CSR2 monitoring plan (Appendix A).

(d) PM Emission Testing – The PM emissions shall be less than the respective limitation for this boiler in condition 4.1.4.

[40 C.F.R. §§ 64.3(a), 64.3(b)(1), 64.3(b)(4), 64.4(e), and 64.6(d); 45CSR§30-5.1.c. (ES002)]

4.2.10. Monitoring of Indicator Ranges under 40 C.F.R. Part 64 for R015 #4 Boiler & ES002 Electrostatic Precipitator

(a) Number of ESP Modules in Service – A minimum of four (4) of the eleven (11) modules must be in service while the boiler is operating, as specified in the 45CSR2 monitoring plan (Appendix A). The number of modules in service shall be monitored and recorded at least once per 8-hour shift while the boiler is operating.

(b) ESP primary AC voltage – The ESP primary AC voltage must be at least 50 volts as measured on each of the four (4) volt meters on #4 Boiler's ESP ES002. The permittee shall monitor and record at least four (4) data values equally spaced over each hour through the Foxboro process control system (or equivalent data collection system). As a backup, data shall be manually logged if Foxboro is unavailable. Data shall be averaged daily each calendar day the boiler is operating.

If new equipment will be installed to record local readings into Foxboro, then such equipment shall be installed, tested, or final verification shall be made, consistent with 40 C.F.R. §64.3(b)(2), within 180 days after the issuance date of this renewal operating permit.

(c) Opacity – The opacity range is 0 to 10 percent. Data shall be monitored and recorded in accordance with the 45CSR2 monitoring plan (Appendix A).

(d) PM Emission Testing – The PM emissions shall be less than the respective limitation for this boiler in condition 4.1.4.

[40 C.F.R. §§ 64.3(a), 64.3(b)(1), 64.3(b)(4), 64.4(e), and 64.6(d); 45CSR§30-5.1.c. (ES001)]

4.2.11. Excursion Definitions under 40 C.F.R. Part 64 for R072 #5 Boiler & ES001 Electrostatic Precipitator and R015 #4 Boiler & ES002 Electrostatic Precipitator.

(a) Number of Modules on Precipitator T/R Cabinets in Service – An excursion shall be any time while the boiler is operating when less than the minimum number of modules specified in conditions 4.2.9.(a) and 4.2.10.(a) for #5 Boiler and #4 Boiler, respectively, are not operating.

(b) Primary AC Voltage - An excursion shall be any daily average less than 50 volts.

(c) Opacity monitoring – An excursion shall be any Method 9 reading greater than 10 percent opacity.

(d) PM Emission Testing – An excursion shall be any emission testing result greater than the respective PM emission limitations in condition 4.1.4.

[40 C.F.R. §64.6(c)(2); 45CSR§30-5.1.c.]

4.2.12. Monitoring of Indicator Ranges under 40 C.F.R. Part 64 for R011 #3 Boiler & Fabric Filter FF001

(a) Number of Baghouse Compartments in Service – A minimum of five (5) of the eight (8) baghouse compartments must be in service while the boiler is operating. Data shall be collected through the Foxboro process control system. As a backup, data can be manually logged if Foxboro is unavailable. The permittee shall monitor the operational status at least twice per 8-hour shift when the boiler is operating. Each of the eight (8) compartments will be inspected twice per month.

(b) Differential Pressure across the Baghouse – The differential pressure shall be 0.1 in. w.c. to 8.0 in. w.c. (inclusive). That is, $0.1 \leq \Delta P \leq 8.0$ in. w.c. The permittee shall monitor the differential pressure at least twice per 8-hour shift when the boiler is operating. Data shall be collected through the Foxboro process control system. As a backup, data can be manually logged if Foxboro is unavailable. The data values collected each day shall be averaged daily.

(c) Opacity monitoring – The opacity range is 0 to 10 percent. Data shall be monitored and recorded in accordance with the 45CSR2 monitoring plan (Appendix A).

(d) PM Emission Testing – No greater than the PM emission limitations for this boiler in condition 4.1.4.

[40 C.F.R. §§ 64.3(a), 64.3(b)(1), 64.3(b)(4), 64.4(e), and 64.6(d); 45CSR§30-5.1.c.]

4.2.13. Excursion Definitions under 40 C.F.R. Part 64 for R011 #3 Boiler & Fabric Filter FF001

(a) Number of Baghouse Compartments in Service – An excursion shall be any time while the boiler is operating when less than five (5) out of eight (8) total compartments are in service.

(b) Differential Pressure across the Baghouse - An excursion shall be any daily average less than 0.1 in. w.c. or greater than 8.0 in. w.c.

(c) Opacity monitoring – An excursion shall be any Method 9 reading greater than 10 percent opacity.

(d) PM Emission Testing – An excursion shall be any emission testing result greater than the PM emission limitations for this boiler in condition 4.1.4.

[40 C.F.R. §64.6(c)(2); 45CSR§30-5.1.c.]

4.3. Testing Requirements

4.3.1. The owner or operator shall conduct, or have conducted, tests to determine the compliance of Boilers No. 3, 4, and 5 with the PM weight emission limitations. Such tests shall be conducted in accordance with **t**he appropriate method set forth in 45CSR2 Appendix – Compliance Test Procedures for 45CSR2 or other equivalent EPA approved method approved by the Secretary, and with the schedule set forth in the following table. Boiler 3 conducted compliance testing on 1/17/2012 and is currently on testing Cycle 3 (three year frequency). Boiler 3 will need to be retested by 1/17/2015. Boiler 4 conducted compliance testing on 1/18/11 and is currently on testing Cycle 2 (two year frequency). Boiler 4 will need to be retested by 1/18/2013. Boiler 5 conducted compliance testing on 1/19/11 and is currently on testing Cycle 2 (two year frequency). Boiler 5 will need to be retested by 1/19/2013. Subsequent testing will be based on the schedule below.

Test	Test Results	Testing Frequency
Initial Baseline	≤50% of weight emission standard	Once/3 years
Initial Baseline	Between 50% and 80% of weight emission standard	Once/2 years
Initial Baseline	≥80% of weight emission standard	Annual
Annual	After three successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Annual	After two successive tests indicate mass emission rates <80% of weight emission standard	Once/2 years
Annual	Any test indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/2 years	After two successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Once/2 years	Any test indicates a mass emission rate <80% of weight emission standard	Once/2 years
Once/2 years	Any test indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/3 years	Any test indicates a mass emission rate ≤50% of weight emission standard	Once/3 years
Once/3 years	Any test indicates mass emission rates between 50% and 80 % of weight emission standard	Once/2 years
Once/3 years	Any test indicates a mass emission rate ≥80% of weight emission standard	Annual

[45CSR§2-8.1.; 45CSR§2A-5.2.; 40 C.F.R. §§64.3(a), (b)(1), (b)(3), and (b)(4); 45CSR§30-5.1.c.]

4.3.2. As a minimum frequency, the permittee shall perform an annual proof-test to confirm the primary AC voltage reading in Foxboro with a local output signal of all of the primary voltage meters and ESP modules. The initial proof-test must be completed within 180 days after the issuance date of the renewal operating permit.
[40 C.F.R. §§ 64.3(b)(3), 64.4(e), and 64.6(d); 45CSR§30-5.1.c. (ES001, ES002)]

4.3.3. As a minimum frequency, the permittee shall perform an annual proof test that sends a known differential pressure to each transmitter and confirms the output with the known value. The initial proof-test must be completed within 180 days after the issuance date of the renewal permit.
[40 C.F.R. §§ 64.3(b)(3), 64.4(e), and 64.6(d); 45CSR§30-5.1.c. (FF001)]

4.4. Recordkeeping Requirements

4.4.1. The permittee shall keep records of monitored data established in the PM (45CSR2) and SO_2 (45CSR10) monitoring plans (Appendix A).
[45CSR§2-8.3.a.; 45CSR§10-8.3.a.; 45CSR2 and 45CSR10 Monitoring Plan – I.A.3., I.B.3., I.C.3., I.D., II.A.2., and II.B.]

4.4.2. Records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit, shall be maintained on-site in a manner to be established by the Secretary and made available to the Secretary or his duly authorized representative upon request.
[45CSR§2-8.3.c.; 45CSR§10-8.3.c.]

4.4.3. The permittee shall comply with the applicable recordkeeping requirements of **45CSR§2A-7.1.a.4.** For Boilers No. 3 and 5, which burn only coal, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of coal consumed on a daily basis and an ash and BTU analysis for each coal shipment.
[45CSR§2-8.3.c.; 45CSR§2A-7.1.a.4.]

4.4.4. The permittee shall comply with the applicable recordkeeping requirements of **45CSR§§2A-7.1.a.4. and 7.1a.6.** For Boiler No. 4, which burns coal and has the ability to co-fire pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of coal burned on a daily basis, an ash and BTU analysis for each coal shipment, and the quantity of pipeline quality natural gas burned on a monthly basis.
[45CSR§2-8.3.c.; 45CSR§§2A-7.1.a.1., 7.1.a.4., and 7.1.a.6.]

4.4.5. The permittee shall maintain fuel consumption records for Boiler No. 6 to include, but not be limited to, the fuel type(s) and their associated daily average hourly, and annual, consumption rates during boiler start-up and routine operation.
[45CSR13; R13-1637, 4.4.1.]

4.4.6. Per the PM (45CSR2) and SO_2 (45CSR10) monitoring plans (Appendix A), a copy of the gaseous hydrogen fuel analysis shall be maintained on-site.
[45CSR2 and 45CSR10 Monitoring Plan I.D. and II.B.]

4.5. Reporting Requirements

4.5.1. For Boilers No. 3, 4, and 5, a periodic exception report to the 45CSR2 (PM emissions/opacity) and the 45CSR10 (SO_2 emissions) monitoring plans shall be submitted to the Secretary, in a manner and at a frequency to be established by the Secretary. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in the approved monitoring plans and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken.
[45CSR§2-8.3.b.; 45CSR§10-8.3.b; 45CSR2 and 45CSR10 Monitoring Plan I.A., I.B.,I.C., and II.A.]

4.5.2. With respect to excursions associated with measured PM weight emissions from Boilers No. 3, 4, and 5, compliance with the reporting and testing requirements under the Appendix to 45CSR2 shall fulfill the requirement for periodic exception report under subdivision 45CSR§2-8.3.b.
[45CSR§2A-7.2.a.]

4.5.3. Because the permittee's approved 45CSR2 monitoring plan employs non-COMS based monitoring as the method of monitoring compliance with opacity limits for Boilers No. 4 and 5, the company shall submit a "Monitoring Summary Report" and/or an "Excursion and Monitoring Plan Performance Report" to the Secretary on a quarterly basis. All reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter.
[45CSR§2A-7.2.c.; 45CSR2 and 45CSR10 Monitoring Plan - I.B.2. and I.C.2.]

4.5.4. For Boilers No. 3, 4, and 5: Excess opacity periods resulting from malfunctions and meeting the following conditions, may be reported on a quarterly basis unless otherwise required by the Secretary:

a. The excess opacity period does not exceed thirty (30) minutes within any twenty-four (24) hour period; and

b. Excess opacity does not exceed forty percent (40%).

[45CSR§2-9.3.a.]

4.5.5. For periods of excess particulate matter or excess opacity not meeting the criteria set forth in Section 4.5.4. of this permit, the owner or operator shall report to the Secretary by telephone, telefax, or e-mail any malfunction of the Boilers (No. 3, 4, or 5) or their associated air pollution control equipment, which results in any excess particulate matter or excess opacity, 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 Secretary within thirty (30) days providing the following information:

a. A detailed explanation of the factors involved or causes of the malfunction;

b. The date, and time of duration (with starting and ending times) of the period of excess emissions;

c. An estimate of the mass of excess emissions discharged during the malfunction period;

d. The maximum opacity measured or observed during the malfunction;

e. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and

f. 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.b.]

4.5.6. Each owner or operator employing CEMS as the method of monitoring compliance with SO_2 limits for an approved monitoring plan, shall submit a "CEMS Summary Report" and/or a "CEMS Excursion and Monitoring System Performance Report" to the Secretary quarterly. All reports shall be postmarked no later than forty-five (45) days following the end of each calendar quarter. The CEMS Summary Report shall contain the information and be in the format shown in 45CSR10A Appendix A unless otherwise specified by the Secretary. For Boilers No. 3, 4, and 5, the permittee's approved monitoring plan employs CEMS as the method of monitoring compliance with SO_2 limits.
[45CSR§10A-7.2.a.; 45CSR2 and 45CSR10 Monitoring Plan - II.A.2.]

4.5.7. The date, time, and duration of all non-compliance with the NO_x emission limit for Boiler No. 3 as specified in Section 4.1.10. of this permit shall be recorded and submitted to the Director of the DAQ on a bi-annual basis.
[45CSR14, R14-027, A.10.]

4.5.8. The date, time and duration of all non-compliance with the SO2 emission limit for Boiler No.5 as specified in Section 4.1.6 of this permit shall be recorded and submitted to the director in compliance with 45CSR10.
[45CSR14, R14-027B, A.11.]

4.6. Compliance Plan

4.6.1. Reserved.

5.0. Requirements for Power Department Coal Handling, Emission Points: Z001, Z002, Z003, Z004, Z005, Z007, Z009; and Flyash Handling System, Emission Points - E001, E003, Z006, Z008

5.1. Limitations and Standards

5.1.1. No person shall cause, suffer, allow, or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:

a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;

b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking, or blowing of particulate matter from or by such vehicles or equipment; and

c. Ash or fuel handling systems and ash disposal areas.

[45CSR§2-5.]

5.2. Monitoring Requirements

5.2.2 The permittee shall inspect the Coal Handling and Flyash Handling control systems weekly during periods of normal facility operation.
[45CSR§30-5.1.c.]

5.3. Testing

5.3.1. Reserved.

5.4. Recordkeeping Requirements

5.4.1. The permittee shall maintain records of weekly inspections.
[45CSR§30-5.1.c.]

5.5. Reporting Requirements

5.4.1. Reserved.

5.6. Compliance Plan

5.6.1. Reserved.

6.0. Requirements for Brine Department, Emission Points: E417 – Flare (FL003) on Gas Separator (SP007); and E418 – Flare (FL002) on Zero Discharge Collection Tank (V273)

6.1. Limitations and Standards

6.1.1. No person shall cause, suffer, allow or permit particulate matter to be discharged from any incinerator into the open air in excess of the quantity determined by use of the following formula:

Emissions (lb/hr) = F x Incinerator Capacity (tons/hr)

Where, the factor, F, is as indicated in Table I below:

Table I: Factor, F, for Determining Maximum Allowable Particulate Emissions

	Incinerator Capacity	**Factor F**
A.	Less than 15,000 lb/hr	5.43
B.	15,000 lb/hr or greater	2.72

The following hourly particulate matter emissions limits for the Brine Department flares shall not be exceeded:

Emission Point	**Description**	**PM Emission Limit (lb/hr)**
E417	Flare (FL003) on Gas Separator	0.24
E418	Flare on Zero Discharge Collection Tank	0.12

(Emission Units: FL003 – Flare on Gas Separator (SP007) and FL002 – Flare on Zero Discharge Collection Tank (V273)) **[45CSR§6-4.1.]**

6.1.2. Emission of Visible Particulate Matter –No person shall cause, suffer, allow or permit emission of smoke into the atmosphere from any incinerator which is twenty (20%) percent opacity or greater. *(Emission Units: FL003 – Flare on Gas Separator (SP007) and FL002 – Flare on Zero Discharge Collection Tank (V273))* **[45CSR§6-4.3.]**

6.1.3. The provisions of 6.1.2. shall not apply to smoke which is less than forty (40%) percent opacity, for a period or periods aggregating no more than eight (8) minutes per start-up. *(Emission Units: FL003 – Flare on Gas Separator (SP007) and FL002 – Flare on Zero Discharge Collection Tank (V273))* **[45CSR§6-4.4.]**

6.1.4. Emissions of SO_2 to the atmosphere from the permitted process vent E418 shall not exceed 4.5 lbs/hr or 766 lbs/yr. **[45CSR§13, R13-1527, A.1.]**

6.1.5. The flare (FL002) on process vent E418 shall be equipped with an alarm system to detect "flame-out" condition. If the flare cannot be immediately restarted, all gas flow to the flare shall be shutoff within two (2) hours of "flame-out" alarm. **[45CSR§13, R13-1527, A.2.]**

6.1.6. Emissions of sulfur dioxide from Process #017, Raw Brine Flare (FL003) on process vent E417, shall not exceed 11.65 lbs. SO_2/hour as averaged over a three hour period. **[CO-SIP-C-2003-27, IV.3.D.]**

6.1.7. All exhaust gases from Process #017, Raw Brine Flare (FL003) on process vent E417, shall be exhausted from a stack having a height of forty (40) meters above grade. Any modifications to the stacks in existence on the date of entry (July 29, 2003) of Consent Order CO-SIP-C-2003-27 or replacement of those stacks shall comply with the provisions of 45CSR20 "Good Engineering Practice as Applicable to Stack Heights."
[CO-SIP-C-2003-27, IV.4.]

6.2. Monitoring Requirements

6.2.1. For the purpose of determining compliance with the opacity limits set forth in Sections 6.1.2. and 6.1.3. for flares FL003 and FL002, the permittee shall conduct opacity monitoring and recordkeeping for all emission points and equipment in service that are subject to the opacity limit under 45CSR6.

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 less than 20%.

Opacity monitoring or visible emission checks, or visible emission observations shall be conducted at least once per calendar month. If opacity remains less than 20% for three consecutive months, opacity monitoring/checks/observations may be conducted quarterly. If opacity should equal or exceed 20% during quarterly observations, monthly readings must be implemented until three consecutive monthly readings of less than 20% 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. *(Emission Units: FL003 – Flare on Gas Separator (SP007) and FL002 – Flare on Zero Discharge Collection Tank (V273))* **[45CSR§30-5.1.c.]**

6.3. Testing Requirements

6.3.1. Tests to determine the concentration of H_2S in the gas streams to the flare (FL002) on process vent E418 and the flow rate of those streams shall be conducted at least once per year with the concentration of H_2S reported in units of grains per hundred standard cubic feet of gas. These tests shall be conducted for the following conditions: backwash only, depressurization only, and the combination of backwash and depressurization. A copy of the report for the tests shall be submitted to the Director of Air Quality within thirty (30) days of the end of each calendar year.
[45CSR13, R13-1527, B.]

6.3.2. Process #017, Raw Brine Flare (FL003) on process vent E417, shall demonstrate compliance with Section IV.3.D. of Consent Order CO-SIP-C-2003-27 (condition 6.1.6. of this permit), by conducting testing for the hydrogen sulfide concentration in the gas stream sent to the flare. Testing shall be conducted twice per year. In addition, the company shall, on a daily basis, estimate the flow rate to the Raw Brine Flare and the concentration of H_2S sent to the flare and calculate emissions assuming 100% conversion of H_2S to sulfur dioxide from the unit's flare stack. The methodology previously approved under Consent Order CO-SIP-2000-1 will be used to estimate the total flow rate and concentration of H_2S sent to the flare. This data will be used to

determine compliance with the emission limitation set forth in Section IV.3.D. (condition 6.1.6. of this permit). This protocol shall be incorporated as terms and conditions of Consent Order CO-SIP-C-2003-27 **[CO-SIP-C-2003-27, V.5.]**

6.3.3. Process #017, Raw Brine Flare (FL003) on process vent E417 (a source of sulfur dioxide emissions subject to the testing requirements in CO-SIP-C-2003-27 § V.5.) shall be required to submit a test protocol to the Director, for approval, at least thirty (30) days prior to the projected test dates. The Company shall demonstrate compliance using a reference method under 40 C.F.R. 60 Appendix A. When no such method is available, the Company may, in writing, request approval by the Director to use alternative sampling and analytical procedures. The Director shall be provided written notices of the actual test dates, after approval of the test protocol, but not less than fifteen (15) days prior to the date of testing. The Company shall submit the results of the testing, to the Director, within sixty (60) days of the completion of the test. **[CO-SIP-C-2003-27, V.8.]**

6.3.4. At such reasonable times as the Director may designate, the operator of any incinerator shall be required to conduct or have conducted stack tests to determine the particulate matter loading, by using 40 CFR Part 60, Appendix A, Method 5 or other equivalent EPA approved method approved by the Director, in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or the Director's authorized representative, may at the Director's option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director 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. *(Emission Units: FL003 – Flare on Gas Separator (SP007) and FL002 – Flare on Zero Discharge Collection Tank (V273))* **[45CSR§6-7.1.]**

6.4. Recordkeeping Requirements

6.4.1. The Company shall maintain records of the occurrence, date, time and duration of any malfunction in the operation of sources of sulfur dioxide emissions, any malfunction of air pollution control equipment or any periods during which a control device was inoperative. **[CO-SIP-C-2003-27, VI.1.]**

6.4.2. All data and information required to be recorded or obtained under the terms of Consent Order CO-SIP-C-2003-27 (permit conditions 6.3.2., 6.3.3., and 6.4.1. in this Title V Operating Permit) shall be maintained in a permanent form suitable for inspection and shall be retained for at least five (5) years following the date of the record or report. All such data and information shall be submitted in accordance with the terms of Consent Order CO-SIP-C-2003-27 (permit conditions 6.3.2., 6.3.3., and 6.4.1 . in this Title V Operating Permit) or made available to the Director upon his or her request during any facility inspection by an authorized representative of the Director. **[CO-SIP-C-2003-27, VI.6.]**

6.4.3. The permittee shall maintain records of all monitoring data required by Section 6.2.1. of this permit, documenting the date and time of each visible emissions check, the emission point or equipment identification number, the name or means of identification of the responsible observer, the results of the check, and if necessary, all corrective actions taken. Should a visible emissions observation be required to be performed per the requirements specified in 40 C.F.R. 60 Appendix A, Method 9, then data records of each observation shall be maintained per the requirements of that method. For an emission unit out of service during the normal monthly evaluation, the record of observation may note "out of service" (OOS) or equivalent. These records shall be maintained on site for a period of five years in accordance with 3.4.2. and shall be made available to the Director or his authorized representative upon request. *(Emission Units: FL003 – Flare on Gas Separator (SP007) and FL002 – Flare on Zero Discharge Collection Tank (V273))* **[45CSR§30-5.1.c]**

6.5. Reporting Requirements

6.5.1. After completing the annual tests to determine the concentration of H_2S in the gas streams to the flare (FL002) on process vent E418, the Company shall calculate SO_2 emissions assuming 100% conversion of H_2S to SO_2 in the flare. The SO_2 yearly emissions (lb/yr) shall be calculated for each of the operating scenarios: backwash only, depressurization only, and the combination of backwash and depressurization. In addition, the maximum highest SO_2 hourly emission rate (lb/hr) shall be reported. This data shall be included in the test report, which is submitted to the Director of Air Quality within thirty (30) days of the end of each calendar year. **[45CSR§30-5.1.c.]**

6.5.2. The Company shall report to the Director, by telephone or telefax, any malfunction of such source or its air pollution control equipment which results in any excess sulfur dioxide emission rate within twenty-four (24) hours of becoming aware of such condition. The Company shall file a written report concerning the malfunction with the Director within ten (10) days, providing the following information:

a. A detailed explanation of the factors involved or causes of the malfunction.

b. The date and time of duration (with starting and ending times) of the period of excess emissions.

c. An estimate of the mass of excess emissions discharged during the malfunction period.

d. The maximum emission rate or concentration measured or otherwise determined during the malfunction in units of the applicable emissions standard.

e. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction.

f. 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.

[CO-SIP-C-2003-27, VI.4.]

6.6. Compliance Plan

6.6.1. Reserved.

7.0 Requirements for the HCl Department

7.1. Limitations and Standards.

7.1.1. Emissions from the three HCl synthesis units shall not exceed the following limitations:

a. The concentration of HCl (mineral acid) released into the atmosphere from the tails of each synthesis unit shall not exceed 210 milligram per dry cubic meter at standard conditions.
[45CSR§7-4.2 and Table 45-7B to 45CSR7]

b. Other emissions from the tails of each of the HCl direct synthesis units shall not exceed the following:

Emission Point	Pollutant	Emission Limit pph
E994 (#1)	CO NO_x	10 1.0
E996 (#2)	CO NO_x	10 1.0
E1005 (#3)	CO NO_x	19 1.5

[45CSR13, R13-2046, 4.1.1.]

7.1.2. The HCl Transfer Tanks #1 &#2; HCl Storage Tanks #1, #2, #3, #4, and #5; HCl Tanker Truck Loading; and HCl Rail Car Loading shall be operated and maintained in accordance with the following operating and emission limitations:

a. The concentration of HCl (mineral acid) released into the atmosphere from emission points E995 (Transfer Tanks), E022 (Tanks #1 & #2), E098 (Rail Car), and E023 (Tanks #3/4/5 and the Truck Loading) shall not exceed 210 milligram per dry cubic meter at standard conditions.
[45CSR§7-4.2 and Table 45-7B to 45CSR7]

b. The transfer Tanks #1 and #2 shall be vented/routed to scrubber SC160 at all times while HCl is either being transferred into or stored in these vessels. The scrubber (SC160) shall be operated and maintained in accordance with the following:

i. Scrubber water/liquor shall only pass once through the scrubber;

ii. The flow rate of water/liquor into the scrubber shall not fall below one (1.0) gallon per minute.

c. HCl Tanks #1 and #2 shall be vented/routed to scrubber SC022 at all times while HCl is either being transferred into or stored in these vessels. The scrubber (SC022) shall be operated and maintained in accordance with the following:

i. Scrubber water/liquor shall only pass once through the scrubber;

ii. The flow rate of water/liquor into the scrubber shall not fall below six (6.0) gallons per minute.

d. Off gases generated due to the loading of HCl into rail cars shall be vented/routed to scrubber SC018 at all times while the loading of HCl is being conducted. The scrubber shall be operated and maintained in accordance with the following:

i. Scrubber water/liquor shall only pass once through the scrubber;

ii. The flow rate of water/liquor into the scrubber shall not fall below six (6.0) gallons per minute.

e. HCl Tanks #3, #4, and #5; and the off gases generated due to the loading of HCl into tanker trucks shall be vented/routed to scrubber SC023 at all times while the loading of HCl is being conducted. The scrubber (SC023) shall be operated and maintained in accordance with the following:

i. Scrubber water/liquor shall only pass once through the scrubber;

ii. The flow rate of water/liquor into the scrubber shall not fall below six (6.0) gallons per minute.

[45CSR13, R13-2046, 4.1.2.]

7.1.3. The permittee shall maintain dust 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; 45CSR13, R13-2046, 3.1.7.]

7.1.4. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in this permit may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR13, R13-2046, 4.1.3.; 45CSR§7-9.1]

7.1.5. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in permit Section 1.1, Subsection 7.0. (HCl Dept. and HCl Dept. – Loading), and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-2046, 4.1.4.]

7.2. Monitoring Requirements

7.2.1. The permittee shall provide and maintain for all tanks referenced herein a preventive maintenance/vessel inspection program which shall ensure vessel integrity. Records of such inspections shall be maintained in accordance with condition 3.4.2. of this permit.
[45CSR13, R13-2046, 4.2.3.]

7.2.2. In order to determine compliance with condition 7.1.2. of this permit, the permittee shall monitor and record water flow to the scrubbers at least once every 15 minutes and use these readings to create an hourly average flow rate. These hourly averages will be used to formulate a daily average which will be used to demonstrate compliance with the flow limitation. At the minimum, a daily average must be determined using at least 18 hours of valid data. Such records shall be maintained in accordance with condition 3.4.2. of this permit.
[45CSR13, R13-2046, 4.2.2.]
[40 C.F.R. §§ 64.3(a), 64.3(b)(1) and (4); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160)]

7.2.3. The permittee shall monitor the pH of the scrubber effluent water. The pH must be maintained between 0.45 and 10 (inclusive). Monitoring shall be on an hourly frequency, collected through the Foxboro process control system (or equivalent data collection system), and data shall be averaged daily each calendar day the control device is operating. Manual data logging can be utilized as a backup method. At a minimum, a daily average must be determined with at least 18 hours of valid data.
[40 C.F.R. §§ 64.3(a), 64.3(b)(1) and (4); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160)]

7.2.4. **Excursion Definitions under 40 C.F.R. Part 64**

(a) Water Flow for Scrubbers SC022, SC018, and SC023 - An excursion shall be a daily average flow rate (as determined by condition 7.2.2.) less than the values in sections 7.1.2.c.ii., 7.1.2.d.ii., and 7.1.2.e.ii. for scrubbers SC022, SC018, and SC023, respectively.

(b) Water Flow for Scrubbers SC160 - An excursion shall be a daily average flow rate (as determined by condition 7.2.2.) less than the value in section 7.1.2.b.ii.

(c) pH of effluent from Scrubbers SC018, SC022, SC023, and SC160 – An excursion shall be a daily average pH outside of the range specified in section 7.2.3.

[40 C.F.R. §64.6(c)(2); 45CSR§30-5.1.c.]

7.2.5. The permittee shall install, maintain, and operate an HCl measuring device at the outlet tail of each synthesis unit for the purpose of measuring the outlet concentration of HCl on a continuous basis. Such instrumentation does not have to meet a performance specification developed by U.S. EPA. However, the permittee shall develop a written monitoring plan that outlines the procedures for calibrating the instrument and conducting calibration checks.

During periods of malfunction, maintenance, calibration checks, or "out-of-control periods" of the instrument, the permittee shall monitor and record process data of the respective synthesis unit that can be used to determine compliance with the HCl concentration limit of condition 7.1.1. The process data used during these periods shall be outlined in the monitoring plan. This recorded data shall be compared to historical data that has been verified to be in compliance by measurements of the instrument.

Records of measured data, calibration checks, quality assurance procedures, instrument malfunctions/failures and maintenance performed on the instrument shall be maintained in accordance with condition 3.4.2.

[45CSR13, R13-2046, 4.2.1.] (SU004, SU005, SU006)

7.3. Testing Requirements

7.3.1. Flow meters to measure scrubber influent water flow rate shall be calibrated on an annual frequency.
[40 C.F.R. §64.3(b)(3); 45CSR§30-5.1.c. (SC018, SC022, SC023)]

7.3.2. Probes used to measure pH of scrubber effluent shall be calibrated on a quarterly frequency.
[40 C.F.R. §64.3(b)(3); 45CSR§30-5.1.c. (SC018, SC022, SC023, SC160)]

7.3.3. The flow switch to measure scrubber influent water flow rate shall be proof tested on an annual frequency. **[40 C.F.R. §64.3(b)(3); 45CSR§30-5.1.c. (SC160)]**

7.4. Recordkeeping Requirements

7.4.1. The permittee shall perform modeling, other engineering calculations, and /or direct sampling that demonstrate that the minimum flow of water/liquor in the respective scrubbers, covered under Condition 7.1.2., will ensure compliance with HCl concentration limit of 7.1.2.a. for the respective emission point. Such analysis shall be maintained on site until another demonstration is conducted which replaces the previous demonstration. **[45CSR13, R13-2046, 4.4.4.]**

7.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.1, Subsection 7.0. (HCl Dept. and HCl Dept. – Loading), the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. **[45CSR13, R13-2046, 4.4.2.]**

7.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.1, Subsection 7.0. (HCl Dept. and HCl Dept. – Loading), the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2046, 4.4.3.]

7.5. Reporting Requirements

7.5.1. Reserved.

7.6 Compliance Plan

7.6.1 Reserved.

8.0 Requirements for the Chlorine Department's Chlorine Recovery & #7 Mercury Circuit: Emission Points/Unit E038 - Chlorine Degas; E320 - Hydrogen Degas, Carbon Absorber #1 (A001), Carbon Absorber #2 (A002); E039 - Hydrogen Purification, Contact Cooler (CS020), Brine Scrubber (SC005), Caustic Scrubber (SC006); No. 7 Circuit Cell Room (Z018)

8.1. Limitations and Standards

8.1.1. To minimize sulfur dioxide emissions, Process #019, Chlorine Recovery shall be fired only with natural gas. **[CO-SIP-C-2003-27, IV.3.B.]**

8.1.2. Emissions to the air of methylene chloride from the emission points or sources listed below shall not exceed the following limitations:

Emission Point Source ID #	Methylene Chloride Emission Limit after BAT (TPY)
Fugitives	2.50
River Outfall	(0.31)
Total (Excluding River)	2.50

[45CSR§§27-3.1 and 11.1. (State-Enforceable only); CO-R27-91-18, III.2. and Attachment B (State-Enforceable only)]

8.1.3. **Emission Limitation.** During any consecutive 52-week period, the permittee must not discharge to the atmosphere total mercury emissions in excess of 0.076 grams of mercury per megagram of chlorine produced (1.5×10^{-4} pounds of mercury per ton of chlorine produced) from all by-product hydrogen streams and all end box ventilation system vents. The permittee must be in compliance with the emission limitation at all times, except during periods of startup, shutdown, and malfunction. *(Emission Points: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039))*
[40 C.F.R. §§ 63.8190(a)(2)(i) and 63.8226(a); 45CSR34]

8.1.4. **Written Washdown Plan.** The permittee must prepare, submit, and operate according to a written washdown plan designed to minimize fugitive mercury emissions through routine washing of surfaces where liquid mercury could accumulate. The written plan must address the elements contained in Table 7 of 40 C.F.R. 63 Subpart IIIII. The permittee must maintain a copy of the current washdown plan and records of when each washdown occurs. *(Emission Unit: No. 7 Circuit Cell Room (Z018))*
[40 C.F.R. §§ 63.8192(e), 63.8246(c), and 63.8256(c)(2); 45CSR34]

8.1.5. **Operation and Maintenance Requirements.** As required by 40 C.F.R. §63.6(e)(1)(i), the permittee must always operate and maintain the affected sources, including air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. *(Emission Points/Unit: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039), No. 7 Circuit Cell Room (Z018))*
[40 C.F.R. § 63.8222; 45CSR34]

8.1.6. **Written Startup, Shutdown, Malfunction Plan.** The permittee must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in 40 C.F.R. § 63.6(e)(3). During periods of startup, shutdown, and malfunction, the permittee must operate in accordance with the startup, shutdown, and malfunction plan.

8.1.6.1. Consistent with 40 C.F.R. §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Director's satisfaction that the permittee has an adequate startup, shutdown, or malfunction plan that satisfies the requirements of 40 C.F.R. § 63.6(e), and that the permittee has complied with the startup, shutdown, and malfunction plan.

8.1.6.2. The Director will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in 40 C.F.R.§ 63.6(e).

8.1.6.3. By-passing the control device for maintenance activities is not considered a startup, shutdown, or malfunction event.

Immediate Startup, Shutdown, and Malfunction Report. If the permittee took an action during a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with the startup, shutdown, and malfunction plan required in by this permit condition, and the source exceeded the applicable emission limitation in permit condition 8.1.3., the permittee must submit an immediate startup, shutdown, and malfunction report according to the requirements in 40 C.F.R. §63.10(d)(5)(ii).

(Emission Points/Unit: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039), No. 7 Circuit Cell Room (Z018))

[40 C.F.R. §§ 63.8226(b), 63.8248(b)(1)-(3), and 63.8254(c); 45CSR34]

8.2. Monitoring Requirements

8.2.1. Process #019, Chlorine Recovery shall demonstrate compliance with 8.1.1. by firing only pipeline quality natural gas. [**CO-SIP-C-2003-27, V.3.]**

8.2.2. **Cell Room Monitoring Program.** The permittee must institute a cell room monitoring program to continuously monitor the mercury vapor concentration in the upper portion of each cell room and must take corrective actions as quickly as possible when elevated mercury vapor levels are detected. A cell room monitoring plan must contain the elements listed in Table 5 of 40 C.F.R. 63 Subpart IIIII and meet the following requirements:

8.2.2.1. The permittee must utilize mercury monitoring systems that meet the requirements of Table 8 of 40 C.F.R. 63 Subpart IIIII.

8.2.2.2. The permittee must establish an action level according to 40 C.F.R. §63.8192(g)(2)(i) through (iii).

8.2.2.3. Beginning on the compliance date December 19, 2006, the permittee must continuously monitor the mercury concentration in the cell room. Failure to monitor and record the data according to 40 C.F.R. §63.8256(c)(4)(ii) (permit condition 8.4.4.2.) for 75 percent of the time in any 6-month period constitutes a deviation.

8.2.2.4. If the average mercury concentration for any 1-hour period exceeds the action level established according to 40 C.F.R. §63.8192(g)(2), the permittee must meet the requirements in either paragraph 8.2.2.4.1. or 8.2.2.4.2.

8.2.2.4.1. If the permittee determines that the cause of the elevated mercury concentration is an open electrolyzer, decomposer, or other maintenance activity, the permittee must record the information specified in permit conditions 8.2.2.4.1.1. through 8.2.2.4.1.3.

8.2.2.4.1.1. A description of the maintenance activity resulting in elevated mercury concentration;

8.2.2.4.1.2. The time the maintenance activity was initiated and completed; and

8.2.2.4.1.3. A detailed explanation how all the applicable requirements of Table 1 to 40 C.F.R. 63 Subpart IIIII were met during the maintenance activity.

8.2.2.4.2. If the permittee determines that the cause of the elevated mercury concentration is not an open electrolyzer, decomposer, or other maintenance activity, the permittee must follow the procedures specified in permit conditions 8.2.2.4.2.1. and 8.2.2.4.2.2. of this section until the mercury concentration falls below the action level. The permittee must also keep all the associated records for these procedures as specified in Table 9 to 40 C.F.R. 63 Subpart IIIII.

8.2.2.4.2.1. Within 1 hour of the time the action level was exceeded, the permittee must conduct each inspection specified in Table 2 to 40 C.F.R. 63 Subpart IIIII, with the exception of the cell room floor and the pillars and beam inspections. The permittee must correct any problem identified during these inspections in accordance with the requirements in Table 2 and 3 to 40 C.F.R. 63 Subpart IIIII.

8.2.2.4.2.2. If the Table 2 inspections and subsequent corrective actions do not reduce the mercury concentration below the action level, the permittee must inspect all decomposers, hydrogen system piping up to the hydrogen header, and other potential locations of mercury vapor leaks using a technique specified in Table 6 to 40 C.F.R. 63 Subpart IIIII. If a mercury vapor leak is identified, the permittee must take the appropriate action specified in Table 3 to 40 C.F.R. 63 Subpart IIIII.

The permittee must be in compliance with the applicable work practice standards in 40 C.F.R. §63.8192(g) at all times, except during periods of startup, shutdown, and malfunction.

(Emission Unit: No. 7 Circuit Cell Room (Z018))

[40 C.F.R. §§ 63.8192(g) and 63.8226(a); 45CSR34]

8.2.3. **Continuous Emissions Monitoring and Site-specific Monitoring Plans.**
For each by-product hydrogen stream, each end box ventilation system vent, the permittee must monitor the mercury emissions by continuously monitoring the mercury concentration using a mercury continuous emissions monitor (CEM). The permittee must install, operate, and maintain each mercury continuous emissions monitor according to the following requirements:

8.2.3.1 Each mercury continuous emissions monitor must sample, analyze, and record the concentration of mercury at least once every 15 minutes.

8.2.3.2. Each mercury continuous emissions monitor analyzer must have a detector with the capability to detect a mercury concentration at or below 0.5 times the mercury concentration level measured during the performance test conducted according to 40 C.F.R. §63.8232.

8.2.3.3. In lieu of a promulgated performance specification as required in 40 C.F.R. §63.8(a)(2), the permittee must develop a site-specific monitoring plan that addresses the following elements in 8.2.3.3.1. through 8.2.3.3.6.

8.2.3.3.1. Installation and measurement location downstream of the final control device for each by-product hydrogen stream, and end box ventilation system vent.

8.2.3.3.2. Performance and equipment specifications for the sample interface, the pollutant concentration analyzer, and the data collection and reduction system.

8.2.3.3.3. Performance evaluation procedures and acceptance criteria (*i.e.*, calibrations).

8.2.3.3.4. Ongoing operation and maintenance procedures according to the requirements of 40 C.F.R. §63.8(c)(1), (3), and (4)(ii).

8.2.3.3.5. Ongoing data quality assurance procedures according to the requirements of 40 C.F.R. §63.8(d).

8.2.3.3.6. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 C.F.R. §63.10(c), (e)(1), and (e)(2)(i).

8.2.3.4. The permittee must conduct a performance evaluation of each mercury continuous emissions monitor according to the site-specific monitoring plan.

8.2.3.5. The permittee must operate and maintain each mercury continuous emissions monitor in continuous operation according to the site-specific monitoring plan.

8.2.3.6. The permittee must monitor mercury concentration according to 8.2.3.1. through 8.2.3.5. at all times that the affected source is operating with the exception of the following paragraphs 8.2.3.6.1. and 8.2.3.6.2.

8.2.3.6.1. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee must monitor mercury emissions continuously (or collect data at all required intervals) at all times that the affected source is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

8.2.3.6.2. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing compliance.

(Emission Points: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039))

[40 C.F.R. §§ 63.8240(a), 63.8242(a) and 63.8244(a); 45CSR34]

8.2.4. **Equations and Procedures to Demonstrate Continuous Compliance.** For all by-product hydrogen streams and all end box ventilation system vents the permittee must demonstrate continuous compliance with the mercury emission limit in permit condition 8.1.3. by reducing the mercury emissions data to 52-week averages using Equation 1 of 40 C.F.R. §63.8243(a)(3) and maintaining the 52-week rolling average mercury emissions no higher than the limit in permit condition 8.1.3. According to the following procedures, the permittee must begin collecting data on the compliance date (December 19, 2006) and calculate the first 52-week average mercury emission rate at the end of the 52nd week after the compliance date.

8.2.4.1. Each week, the permittee must determine the weekly mercury emission rate in grams per week for each by-product hydrogen stream and for each end box ventilation system vent using continuous mercury monitoring according to permit condition 8.2.3.

8.2.4.2. Each week, the permittee must determine the chlorine production and keep records of the production rate as required under permit condition 8.4.2.6.

8.2.4.3. Beginning 52 weeks after December 19, 2006, the permittee must calculate the 52-week average mercury emission rate from all by-product hydrogen steam and all end box ventilation system vents using Equation 1 of 40 C.F.R. §63.8243(a)(3).

8.2.4.4. To obtain the data to calculate these 52-week averages, the permittee must continuously monitor in accordance with permit condition 8.2.3.6., representing at least 75 percent of the 15-minute periods in each operating day of the 52-week compliance period (with data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities not counting toward the 75 percent requirement).

(Emission Points: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039))

[40 C.F.R. §§ 63.8246(a)(1)(i), 63.8243(a)(1)-(3); 45CSR34]

8.3. Testing Requirements

8.3.1. Reserved.

8.4. Recordkeeping Requirements

8.4.1. The permittee must keep the following general records for 40 C.F.R. 63 Subpart IIIII:

8.4.1.1. A copy of each notification and report that the permittee submitted to comply with 40 C.F.R. 63 Subpart IIIII, including all documentation supporting any initial notification or Notification of Compliance Status that was submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

8.4.1.2. The records in 40 C.F.R. §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(Emission Points/Unit: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039), No. 7 Circuit Cell Room (Z018))

[40 C.F.R. §63.8256(a); 45CSR34]

8.4.2. The permittee must keep records associated with the byproduct hydrogen stream and end box ventilation system vent emission limitation. The permittee must keep the following records related to the emission limitation in §63.8190(a)(2)(i) (permit condition 8.1.3.).

8.4.2.1. Records of performance tests as required in 40 C.F.R. §63.10(b)(2)(viii).

8.4.2.2. Records of the mercury emissions monitoring conducted during the performance tests.

8.4.2.3. Records of the continuous mercury emissions monitoring data.

8.4.2.4. Records of the 52-week rolling average mercury emissions.

8.4.2.5. Records associated with the site-specific monitoring plan required in permit condition 8.2.3. (i.e., results of inspections, calibrations, and validation checks of each mercury concentration continuous monitoring system (CMS)).

8.4.2.6. Records of chlorine production on a weekly basis.

(Emission Points/Unit: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039), No. 7 Circuit Cell Room (Z018))

[40 C.F.R. §§ 63.8256(b)(1)-(6), 63.8246(a)(2) and 63.8243(a)(2); 45CSR34]

8.4.3. The permittee must maintain records of the mass of virgin mercury added to cells for each reporting period, and on an annual basis. *(Emission Unit: No. 7 Circuit Cell Room (Z018))*
[40 C.F.R. §§ 63.8256(c)(3), 63.8246(c), and 63.8192(f); 45CSR34]

8.4.4. The permittee must keep a record of the current cell room monitoring plan and the records specified in the following conditions:

8.4.4.1. Records of the monitoring conducted in accordance with 40 C.F.R. §63.8192(g)(2)(i) to establish your action level, and records demonstrating the development of this action level.

8.4.4.2. Records of the cell room mercury concentration monitoring data collected.

8.4.4.3. Instances when the action level is exceeded.

8.4.4.4. Records specified in 40 C.F.R. §63.8192(g)(4)(i) (permit condition 8.2.2.4.1.) for maintenance activities that cause the mercury vapor concentration to exceed the action level.

8.4.4.5. Records of all inspections and corrective actions taken in response to a non-maintenance related situation in which the mercury vapor concentration exceeds the action level (permit condition 8.2.2.4.2.).

(Emission Unit: No. 7 Circuit Cell Room (Z018))

[40 C.F.R. §§ 63.8256(c)(4)(i)-(v), and 63.8246(c); 45CSR34]

8.4.5. The permittee must maintain records pursuant to 40 C.F.R. Part 63 Subpart IIIII according to the following requirements:

8.4.5.1. Records must be in a form suitable and readily available for expeditious inspection and review, according to 40 C.F.R. §63.10(b)(1).

8.4.5.2. As specified in 40 C.F.R. §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

8.4.5.3. The permittee must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years.

(Emission Points/Unit: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039), No. 7 Circuit Cell Room (Z018))

[40 C.F.R. §§ 63.8258(a), (b), and (c); 45CSR34]

8.5. Reporting Requirements

8.5.1. **45CSR27 Reporting Requirements.** All notices and reports required to be submitted to the United States Environmental Protection Agency ("USEPA") under subpart H shall be submitted to the Director (and the USEPA Administrator, if appropriate) in accordance with the requirements of subpart H and Consent Order CO-R27-91-18.
[45CSR§27-11.1. (State-Enforceable only); CO-R27-98-39A(91), II.1. (State-Enforceable only)]

8.5.2. **45CSR27 Reporting Requirements.** If the emission of any TAP unknown to be occurring on the date of entry of Consent Order CO-R27-91-18 (which was June 25, 1991) is not addressed and is discovered by the permittee, the permittee shall notify the Director within fifteen (15) days of such discovery. Unless the Director determines these emissions to be insignificant, the permittee shall submit any necessary BAT Plan for control of this emission within sixty (60) days of the date of such notification. Upon determination by the Director that any required control program for such source represents BAT, the Director shall consider such program for inclusion as an amendment to Consent Order CO-R27-91-18 and determine any conditions to be met for approval and entry of such Amended Consent Order.
[45CSR§§27-3.1. and 11.1. (State-Enforceable only); CO-R27-91-18, III.4. (State-Enforceable only)]

8.5.3. **Compliance report due dates for 40 C.F.R. 63 Subpart IIIII**. The permittee must submit a semiannual compliance report to the Director according to the requirements set forth below.

8.5.3.1. The first compliance report must cover the period beginning on the compliance date December 19, 2006, and ending on June 30, 2007.

8.5.3.2. The first compliance report must be postmarked or delivered no later than July 31, 2007.

8.5.3.3. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

8.5.3.4. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(Emission Points/Unit: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039), No. 7 Circuit Cell Room (Z018))

[40 C.F.R. §63.8254(a); 45CSR34]

8.5.4. **Compliance report contents for 40 C.F.R. 63 Subpart IIIII**. Each compliance report must contain the information in conditions 8.5.4.1. through 8.5.4.3., and as applicable, 8.5.4.4. through 8.5.4.10.

8.5.4.1. Company name and address.

8.5.4.2. Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report.

8.5.4.3. Date of report and beginning and ending dates of the reporting period.

8.5.4.4. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in 40 C.F.R. §63.10(d)(5)(i).

8.5.4.5. If there were no deviations from the continuous compliance requirements in 40 C.F.R. §63.8246 (permit condition 8.2.4., 8.4.2., 8.4.3., and 8.4.4.) that apply, a statement that there were no deviations from the emission limitations, work practice standards, and operation and maintenance standards during the reporting period.

8.5.4.6. If there were no periods during which the mercury continuous emission monitor was out-of-control as specified in 40 C.F.R. §63.8(c)(7), a statement that there were no periods during the which the mercury continuous emissions monitor or CPMS (if applicable) were out-of-control during the reporting period.

8.5.4.7. For each deviation from an emission limitation occurring at an affected source where you are using a mercury continuous emission monitor, according to the site-specific monitoring plan required in 40 C.F.R. §63.8242(a)(3) (permit condition 8.2.3.3.), to comply with the emission limitation permit condition 8.1.3., the permittee must include the information in permit conditions 8.5.4.1. through 8.5.4.4., and the information in the following requirements 8.5.4.7.1. through 8.5.4.7.12. This includes periods of startup, shutdown, and malfunction.

8.5.4.7.1. The date and time that each malfunction started and stopped.

8.5.4.7.2. The date and time of each instance in which a continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.

8.5.4.7.3. The date, time, and duration of each instance in which a continuous monitoring system was out-of-control, including the information in 40 C.F.R. §63.8(c)(8).

8.5.4.7.4. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

8.5.4.7.5. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

8.5.4.7.6. A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

8.5.4.7.7. A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of monitoring system downtime as a percent of the total source operating time during the reporting period.

8.5.4.7.8. An identification of each hazardous air pollutant that was monitored at the affected source.

8.5.4.7.9. A brief description of the process units.

8.5.4.7.10. A brief description of the continuous monitoring system.

8.5.4.7.11. The date of the latest continuous monitoring system certification or audit.

8.5.4.7.12. A description of any changes in monitoring system, processes, or controls since the last reporting period.

8.5.4.8. The compliance report must contain the mass of virgin mercury added to cells for the reporting period.

8.5.4.9. The permittee must report each instance in which the permittee did not meet the following work practice standards in 40 C.F.R. §63.8192:

8.5.4.9.1. The washdown plan, as set forth in permit condition 8.1.4.

8.5.4.9.2. The recordkeeping of the mass of all virgin mercury added to cells, as set forth in permit condition 8.4.3.

8.5.4.9.3. The cell room monitoring plan, as set forth in permit condition 8.2.2.

8.5.4.10. The compliance report must include a description of any changes to the following plans during the reporting period.

8.5.4.10.1. The washdown plan, as set forth in permit condition 8.1.4.

8.5.4.10.2. The cell room monitoring plan, as set forth in permit condition 8.2.2.

8.5.4.10.3. The site-specific monitoring plan, as set forth in permit condition 8.2.3.

(Emission Points/Unit: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039), No. 7 Circuit Cell Room (Z018))

[40 C.F.R. §§ 63.8254(b), 63.8248(a)(1) and (2); 45CSR34; 45CSR§30-12.7.]

8.5.5. Refer to permit condition 8.1.6. for requirements for the immediate startup, shutdown, malfunction report. *(Emission Points/Unit: Chlorine Degas (E038), Hydrogen Degas (E320), Hydrogen Purification (E039), No. 7 Circuit Cell Room (Z018))*
[40 C.F.R. §63.8254(c); 45CSR34]

8.6. Compliance Plan

8.6.1. NA

9.0. Requirements for Calcium Hypochlorite (Cal-Hypo) Department: Emission Points E004 - Lime Silo #1, Filter (FF002); E027 - Lime Silo #2, Filter (FF007); and S001 - Stack Blower (FN003) following Caustic Scrubbers (SC001 and SC002) and Baghouse (FF005)

9.1. Limitations 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. These provisions shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period. *(Emission Unit: FN003 – Stack Blower following Caustic Scrubbers (SC001 and SC002) and Baghouse (FF005))* **[45CSR§§7-3.1. and 3.2.]**

9.1.2. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 9.1.3. is required to have a full enclosure and be equipped with a particulate matter control device. *(Emission Units: B012 – Lime Silo #1 and B014 – Lime Silo #2)* **[45CSR§7-3.7.]**

9.1.3. 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. *(Emission Units: B012 – Lime Silo #1 and B014 – Lime Silo #2)* **[45CSR§7-5.1.]**

9.2. Monitoring Requirements

9.2.1. For the purpose of determining compliance with the opacity limits of 9.1.1. and 9.1.2., the permittee shall monitor at least once per eight hour shift: the pressure drop across each of the two Lime Silo Filters (FF002 and FF007), the gas flowrate out of the baghouse (FF005) preceding the caustic scrubbers (SC001 and SC002) and the pressure drop across the caustic scrubbers (SC001 and SC002). A minimum of 95% of the readings of each parameter shall be available during each six month Title V reporting period. **[45CSR§30-5.1.c.]**

9.3. Testing Requirements

9.3.1. During stack sampling pursuant to 45CSR§7-8.1., any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures. **[45CSR§7-4.12.]**

9.3.2. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director 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. **[45CSR§7-8.1.]**

9.3.3. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions. **[45CSR§7-8.2.]**

9.4. Recordkeeping Requirements

9.4.1. Reserved.

9.5. Reporting Requirements

9.5.1. NA

9.6. Compliance Plan

9.6.1. NA

10.0 Requirements for Caustic Department: Emission Point E110 – HCl Tank Vent Scrubber (SC019); Emission Point E998 – Metal Cells Tanks Scrubber (SC162)

10.1. Limitations 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. These provisions shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period. *(Emission Unit: E110 – HCl Tank Vent Scrubber)* **[45CSR§§7-3.1 and 3.2]**

10.1.2. Mineral acids shall not be released 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 given in Table 45-7B found at the end of this rule. **[45CSR§7-4.2]**

Per Table 45-7B, the allowable stack gas concentration at standard conditions from source operations or duplicate source operations installed after July 1, 1970 is 210 milligrams per dry cubic meter.

(Emission Unit: E110 – HCl Tank Vent Scrubber)

10.1.3. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from the metals cells tanks scrubber [E998] which is greater than twenty (20) percent opacity. These provisions shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.
[45CSR13, R13-2886, 4.1.1.; 45CSR§§7-3.1. and 3.2.]

10.1.4. Hydrochloric acid shall not be released from the metals cells tanks scrubber [E998] in excess of 210 milligrams per dry cubic meter.
[45CSR13, R13-2886, 4.1.2.; 45CSR§7-4.2.]

10.1.5. The inlet water flow to the scrubber [SC192] shall not be less than 3 gallons per minute when the scrubber is in operation, on a daily average basis.
[45CSR13, R13-2886, 4.1.3.]

10.1.6. The maximum amount of 36% HCl sent to the Metal Cells Acid Tank [V027], on a 12-month rolling average, shall not exceed 85,800 gallons.
[45CSR13, R13-2886, 4.1.4.]

10.1.7. The maximum amount of 36% HCl sent to the Metal Cells Spent Acid Tank [V042], on a 12-month rolling average, shall not exceed 85,800 gallons.
[45CSR13, R13-2886, 4.1.5.]

10.1.8. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 of permit R13-2886 (*i.e.*, Metal Cells Tanks Scrubber SC162) and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-2886, 4.1.6.; 45CSR§13-5.11.]

10.2. Monitoring Requirements

10.2.1. For the purpose of determining compliance with the 20% opacity limit of 10.1.1. and the allowable stack gas concentration limit of 10.1.2., the permittee shall monitor at least once per eight hour shift water flow rate to the HCl tank vent scrubber (a minimum of 95% of the readings shall be available during each six month Title V reporting period), conduct an annual proof test on the flow measuring system, and record the times the scrubber was inoperable and the times corrective actions were taken.
(Emission Unit: E110 – HCl Tank Vent Scrubber) **[45CSR§30-5.1.c.]**

10.2.2. For the purpose of determining compliance with permit conditions 10.1.3., 10.1.4., and 10.1.5., the permittee shall monitor water flow rate to the metal tanks scrubber [SC162] at least once per eight hour shift, and record the times the scrubber was inoperable and the times corrective actions were taken.
[45CSR13, R13-2886, 4.2.1.]

10.3. Testing Requirements

10.3.1. During stack sampling pursuant to 45CSR§7-8.1., any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.
[45CSR§7-4.12.]

10.3.2. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director 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.
[45CSR§7-8.1.]

10.3.3. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.
[45CSR§7-8.2.]

10.4. Recordkeeping Requirements

10.4.1. **Record of Maintenance of Air Pollution Control Equipment**. For all pollution control equipment listed in Section 1.0 of permit R13-2886 (*i.e.*, Metal Cells Tanks Scrubber SC162), the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.
[45CSR13, R13-2886, 4.4.2.]

10.4.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 of permit R13-2886 (*i.e.*, Metal Cells Tanks Scrubber SC162), the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13, R13-2886, 4.4.3.]

10.4.3. The permittee shall maintain inlet water flow records to the metal cells tanks scrubber [SC162] to demonstrate compliance with the monitoring requirements established in section 10.2.2. of this permit. To demonstrate compliance, a minimum of 95% of the readings shall be available.
[45CSR13, R13-2886, 4.4.4.]

10.4.4. To demonstrate compliance with sections 10.1.6. and 10.1.7. of this permit, the permittee shall maintain records of the volume of 36% HCl sent to the Metal Cells Acid Tank [V027] and the Metal Cells Spent Acid Tank [V042].
[45CSR13, R13-2886, 4.4.5.]

10.5. Reporting Requirements

10.5.1. NA

10.6. Compliance Plan

10.6.1 NA

11.0. Requirements for PELS™ Department: Emission Points E302 - Prill Tower Air Scrubber and E629 - Molten Salt Furnace

11.1. Limitations and Standards

11.1.1. 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. These provisions shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period. *(Emission Unit: SC068 - Prill Tower Air Scrubber and R900 - Molten Salt Furnace)* **[45CSR§§7-3.1 and 3.2]**

11.1.2. To minimize sulfur dioxide emissions, the Molten Salt Furnace (R900) shall be fired only with natural gas. **[CO-SIP-C-2003-27 § IV.3.B.]**

11.1.3. Emissions of sulfur dioxide (SO_2) from the Molten Salt Furnace (E629) shall not exceed 46.5 lb/hr. **[45CSR§10-3.1.e.]**

11.2. Monitoring Requirements

11.2.1. For the purpose of determining compliance with the opacity limits set forth in 11.1.1., 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 or 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.]**

11.2.2. The Molten Salt Furnace (R900) shall demonstrate compliance with 11.1.2. by firing only pipeline quality natural gas. [**CO-SIP-C-2003-27 § V.3.]**

11.3. Testing Requirements

11.3.1. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director 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.
[45CSR§7-8.1.]

11.3.2. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions.
[45CSR§7-8.2.]

11.4. Recordkeeping Requirements

11.4.1. Records of the visible emissions observations required by 11.2.1. shall document the date and time of each visible emissions check, the name of the responsible observer, the results of the check, and if necessary, all corrective actions taken. These records shall be maintained according to permit condition 3.4.2.
[45CSR§30-5.1.c.]

11.5. Reporting Requirements

11.5.1. NA

11.6. Compliance Plan

11.6.1. NA

12.0 Requirements for Plant Paint Spray Booth Emission Points: E020 – Paint Spray Booth Filter (FF013) and E021 – Paint Spray Booth Filter (FF014)

12.1. Limitations and Standards

12.1.1. 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. These provisions shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period. *(Emission Unit: PB001 – Paint Spray Booth)*
[45CSR§§7.3.1. and 3.2.]

12.1.2. Total emissions to the atmosphere from Emission Points E020 and E021 shall not exceed the following:

Pollutant	Total Emissions	
	Hourly (lb/hr)	**Annual* (lb/yr)**
Volatile Organic Compounds (VOC)	10.0	14,300
Particulate Matter	0.5	263

(Emission Units: FF013 – Paint Spray Booth Filter; FF014 – Paint Spray Booth Filter)

* *"Annual" in this case means a 12-month rolling total.*

[45CSR13, R13-1664, (A); Permit Determination Request Letter dated September 26, 1996 to G. Dale Farley from J. Thomas Horan; 45CSR§30-5.1.c.]

12.1.3. The spray paint booth (PB001) shall be equipped with filters which shall remove a minimum of 95% of particulate emissions.
[45CSR13, R13-1664, (B)(2)]

12.2. Monitoring Requirements

12.2.1. For the purpose of determining compliance with the opacity limits of 12.1.1., the permittee shall check to see that the static pressure reading from the manometer on the outlet filter wall is within the range of 0.01 and 0.17 inches of water on a daily basis when the Paint Spray Booth is in use. **[45CSR§30-5.1.c.]**

12.2.2. For the purpose of determining compliance with the VOC emission limits established in 12.1.2., the permittee shall monitor daily and monthly cumulative VOC emissions based on paint usage. [**45CSR13, R13-1664, (B)(1)]**

12.2.3. For the purpose of determining compliance with the particulate matter emission limits established in 12.1.2., and 12.1.3., the permittee shall maintain records documenting when the paint booth filters are changed. [**45CSR§30-5.1.c]**

12.3. Testing Requirements

12.3.1. During stack sampling pursuant to 45CSR§7-8.1., any stack serving any process source operation or air pollution control equipment on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures. **[45CSR§7-4.12.]**

12.3.2. At such reasonable times as the Director may designate, the operator of any manufacturing process source operation may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases. Such tests shall be conducted in such manner as the Director may specify and be filed on forms and in a manner acceptable to the Director. The Director, or his duly authorized representative, may at his option witness or conduct such stack tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director 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. **[45CSR§7-8.1.]**

12.3.3. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions. **[45CSR§7-8.2.]**

12.4. Recordkeeping Requirements

12.4.1. Log sheets of paint usage (see Appendix B, Example Data Form V) showing VOC daily usage and monthly cumulative usage shall be recorded and maintained according to permit condition 3.4.2, and shall be certified to be true and accurate by plant management. Such data shall be made available to the Director or his duly authorized representative upon request.
[45CSR13, R13-1664, (B)(1)]

12.4.2. Records documenting paint spray booth static pressure checks and filter change outs shall be maintained on site according to permit condition 3.4.2a, and shall be certified to be true and accurate by plant management. Such data shall be made available to the Director or his duly authorized representative upon request.
[45CSR§30-5.1.c]

12.5. Reporting Requirements

12.5.1. NA

12.6. Compliance Plan

12.6.1. NA

13.0 Requirements for Emergency Generators and Pumps, Emission Points: E1000, E1001, E1002, E1003, E1004

13.1. Limitations and Standards

13.1.1. If you have an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.
[40 C.F.R. §63.6595(a)(1); 45CSR34]

13.1.2. For emergency stationary CI RICE[1], you must meet the following requirements, except during periods of startup:

a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2]
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]

During periods of startup you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[1] If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 C.F.R. 63 Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[2] Sources have the option to utilize an oil analysis program as described in 40 C.F.R. §63.6625(i) (permit condition 13.1.6.) in order to extend the specified oil change requirement in Table 2c of 40 C.F.R. 63 Subpart ZZZZ.

[3] Sources can petition the Administrator pursuant to the requirements of 40 C.F.R. §63.6(g) for alternative work practices.

[40 C.F.R. §63.6602, Table 2c, Row 1; 40 C.F.R. §63.6625(h); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.1.3. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 C.F.R. §63.6605(b); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.1.4. If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[40 C.F.R. §§63.6625(e) and 63.6625(e)(2); 40 C.F.R. §63.6640(a), Table 6, Row 9; 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.1.5. If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
[40 C.F.R. §63.6625(f); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.1.6. If you own or operate a stationary CI engine that is subject to the work, operation or management practices in item 1 of Table 2c to 40 C.F.R. 63 Subpart ZZZZ (permit condition 13.1.2.), you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c to 40 C.F.R. 63 Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c to 40 C.F.R. 63 Subpart ZZZZ (permit condition 13.1.2.a.). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine (permit condition 13.1.4.).
[40 C.F.R. §63.6625(i); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.1.7. *Requirements for emergency stationary RICE.* If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (i) through (iii) of this permit condition. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (i) through (iii) of this permit condition, is prohibited. If you do not operate the engine according to the requirements in paragraphs (i) through (iii) of this permit condition, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this condition 13.1.7.(iii), as long as the power provided by the financial arrangement is limited to emergency power.

[40 C.F.R. §63.6640(f)(1); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1*

13.2. Monitoring Requirements

13.2.1. Reserved.

13.3. Testing Requirements

13.3.1. Reserved.

13.4. Recordkeeping Requirements

13.4.1. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan (permit condition 13.1.4.) if you own or operate an existing stationary emergency RICE.
[40 C.F.R. §§63.6655(e) and 63.6655(e)(2); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.4.2. If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
[40 C.F.R. §§63.6655(f) and 63.6655(f)(1); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.4.3. **Form and Retention of Records for 40 C.F.R. 63 Subpart ZZZZ**.

(a) Your records must be in a form suitable and readily available for expeditious review according to 40 C.F.R. §63.10(b)(1).

(b) As specified in 40 C.F.R. §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1).

[40 C.F.R. §§63.6660(a), (b), and (c); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.5. Reporting Requirements

13.5.1. You must report each instance in which you did not meet each limitation in Table 2c to 40 C.F.R. 63 Subpart ZZZZ (permit condition 13.1.2.). These instances are deviations from the emission and operating limitations in 40 C.F.R. 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 C.F.R. §63.6650 (permit condition 13.5.3.).
[40 C.F.R. §63.6640(b); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.5.2. You must also report each instance in which you did not meet the requirements in Table 8 to 40 C.F.R. 63 Subpart ZZZZ that apply to you.
[40 C.F.R. §63.6640(e); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.5.3. The permittee must report all deviations as defined in 40 C.F.R. 63 Subpart ZZZZ in the semiannual monitoring report required by permit condition 3.5.6.
[40 C.F.R. §63.6650(f); 45CSR34] *This condition is subject to the compliance date specified in condition 13.1.1.*

13.6. Compliance Plan

13.6.1. Reserved.

APPENDIX A

45CSR2 & 45CSR10 Monitoring and Recordkeeping Plan

West Virginia DEP – Office of Air Quality
45 CSR 2 and 45 CSR 10
Monitoring Plan

Eagle Natrium LLC

Facility Information:

Facility Name: Eagle Natrium LLC – Natrium Plant

Facility Address: P.O. 191
State Route 2
New Martinsville, WV 26155

Facility Environmental Contact: J. T. Horan

A. Facility Description:

Eagle Natrium LLC – Natrium Plant has three coal-fired boilers, Boilers #3, #4, & #5. Boilers #3 and #4 discharge through a common stack, and Boiler #5 discharges through a separate dedicated stack. Natrium also has a hydrogen boiler (#6) that discharges through the common stack shared by Boilers #3 and #4. All four boilers have a design heat input greater than 10 mmBtu/hr making both 45 CSR 2A (Interpretive Rule for 45 CSR 2) and 45 CSR 10A (Interpretive Rule for 45 CSR 10) applicable to these sources. Natrium also has several manufacturing sources that are covered by 45 CSR 10A.

I. 45 CSR 2 Monitoring Plan:

In accordance with Section 8.2.a of 45 CSR 2, following is the proposed plan for monitoring compliance with opacity limits found in Section 3 of that rule:

A. Boiler #3

Boiler #3 is a coal-fired boiler with a design heat input of 243 mmBtu/hr. The boiler is equipped with a baghouse for the control of particulate emissions.

1. Applicable Standard:

45 CSR 2, §3.1. *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.*

2. Monitoring Method:

The method of monitoring opacity for Boiler #3 will be Method 9 visible emission testing in conjunction with parametric monitoring according to the following plan:

- Method 9 readings will be conducted at a minimum of once per month when the unit has operated for 24 consecutive hours and when conditions are conducive to taking proper Method 9 readings. The Method 9 results will be kept on file for a period of five years from the date of testing.
- The number of baghouse compartments in service at any time will be monitored to indicate baghouse performance. This parameter indicates that the baghouse is operating correctly for the particulate load of the boiler.
- The service "status" of each compartment will be monitored on a continuous display panel and the differential pressure across the compartment (recorded every two hours in the operators log) will be used to determine the status.
- The baghouse contains 8 compartments, 5 of which must be in service for the baghouse to operate correctly. This range is based on past operational experience.
- In the event of an excursion, the baghouse compartments can be isolated and repaired. In the event that the minimum number of compartments in service cannot meet the opacity standard, the boiler will shut down until repairs are completed. Method 9 readings will be taken for a minimum of six (6) minutes for each hour during the excursion and shall continue until four (4) successive six-minute observations demonstrate compliance.

3. Recordkeeping:

The date and time of each startup and shutdown for the unit will be maintained in the operations log. The quantity of coal burned on a daily basis, and the fuel quality (including BTU value and ash content) on a "per shipment" basis will also be maintained. These records will be kept on file for a period of 5 years.

B. Boiler #4

Boiler #4 is a co-fired (coal and natural gas) boiler with a design heat input of 496 mmBtu/hr. The boiler is equipped with a precipitator for the control of particulate emissions.

1. Applicable Standard:

45 CSR 2, §3.1. *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.*

2. Monitoring Method:

The method of monitoring opacity for Boiler #4 will be Method 9 visible emission testing in conjunction with parametric monitoring according to the following plan:

- Method 9 readings will be conducted at a minimum of once per month when the unit has operated for 24 consecutive hours and when conditions are conducive to taking proper Method 9 readings. The Method 9 results will be kept on file for a period of five years from the date of testing.
- The number of modules on the precipitator T/R Cabinets that are in service at any time will be monitored to indicate precipitator performance. This parameter indicates that the precipitator is operating correctly for the particulate load of the boiler.
- The primary AC voltage on the T/R Cabinets is displayed in the operations control room, and this value is recorded once per shift. A voltage reading greater than 0 indicates the modules in that T/R Cabinet are in service.
- The precipitator contains 11 modules, 4 of which must be in service for the precipitator to operate correctly. This range is based on past operational experience.
- In the event of an excursion, the precipitator modules can be isolated and the remaining modules in that T/R cabinet can be returned to service while repairs are made. In the event that the minimum number of modules in service cannot meet the opacity standard, the boiler will shut down until repairs are completed. Method 9 readings will be taken for a minimum of six (6) minutes for each hour during the excursion and shall continue until four (4) successive six-minute observations demonstrate compliance.

3. Recordkeeping:

The date and time of each startup and shutdown for the unit will be maintained in the operations log. The quantity of coal burned on a daily basis, and the fuel quality (including BTU value and ash content) on a "per shipment" basis will also be maintained. These records will be kept on file for a period of 5 years.

C. Boiler #5

Boiler #5 is a coal-fired boiler with a design heat input of 878 mmBtu/hr. The boiler is equipped with a precipitator for the control of particulate emissions.

1. Applicable Standard:

45 CSR 2, §3.1. *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.*

2. Monitoring Method:

   The method of monitoring opacity for Boiler #5 will be Method 9 visible emission testing in conjunction with parametric monitoring according to the following plan: *

   - Method 9 readings will be conducted at a minimum of once per month when the unit has operated for 24 consecutive hours and when conditions are conducive to taking proper Method 9 readings. The Method 9 results will be kept on file for a period of five years from the date of testing.
   - The number of modules on the precipitator T/R Cabinets that are in service at any time will be monitored to indicate precipitator performance. This parameter indicates that the precipitator is operating correctly for the particulate load of the boiler.
   - The primary AC voltage on the T/R Cabinets is displayed in the operations control room, and this value is recorded once per shift. A voltage reading greater than 0 indicates the modules in that T/R Cabinet are in service.
   - The precipitator contains 16 modules, 6 of which must be in service for the precipitator to operate correctly. This range is based on past operational experience.
   - In the event of an excursion, the precipitator modules can be isolated and the remaining modules in that T/R cabinet can be returned to service while repairs are made. In the event that the minimum number of modules in service cannot meet the opacity standard, the boiler will shut down until repairs are completed. Method 9 readings will be taken for a minimum of six (6) minutes for each hour during the excursion and shall continue until four (4) successive six-minute observations demonstrate compliance.

3. Recordkeeping:

   The date and time of each startup and shutdown for the unit will be maintained in the operations log. The quantity of coal burned on a daily basis and the fuel quality

*45 CSR 2A, §6.2.a requires fuel burning units with design heat inputs above 250 mmBtu/hr to use Certified Opacity Monitors (COMs) to satisfy the requirements of the opacity monitoring plan. However, Eagle Natrium LLC per 45 CSR 2A, §6.2.b will be requesting an exemption from the COMs requirement. Therefore, the monitoring plan proposed in this submittal is based on Method 9 testing in conjunction with parametric monitoring.

(including BTU value and ash content) on a "per shipment" basis will also be maintained. These records will be kept on file for a period of 5 years.

D. Boiler #6

Boiler #6 is a hydrogen gas-fired boiler with a design heat input of 181 mmBtu/hr. This boiler utilizes natural gas during start-up and shut-down of the boiler for flame stabilization purposes. Hydrogen gas, which is a byproduct of the plant's chlorine product process, is burned during normal operation. An analysis of the gaseous hydrogen fuel shows the fuel is made-up of hydrogen, nitrogen, oxygen and water vapor. Ash in not present in the fuel. Therefore, to satisfy the requirements of 45 CSR 2A, Natrium proposes to record the amount of natural gas and hydrogen burned in the unit on a monthly basis. These records will be kept on-site for a period of 5 years. In addition, a copy of the fuel analysis will also be maintained on-site.

II. 45 CSR 10 Monitoring Plan:

In accordance with Section 8.2.c of 45 CSR 10, following is the proposed plan for monitoring compliance with the sulfur dioxide weight emission standards expressed in Section 3 of that rule:

A. Boilers #3, #4 and #5

1. Applicable Standard:

   45 CSR 10, §3.1.e. *For Type 'b' and Type 'c' fuel burning units, the product of 3.1 and the total design heat inputs for such units discharging through those stack in million BTU's per hour.*

2. Monitoring Method and Recordkeeping:

   Continuous emissions monitoring systems (CEMS) will be utilized to demonstrate compliance with the weight emission standard. CEMS will be installed, operational, and certified on Boilers #3, #4, and #5. This data will be kept on file for a period of 5 years.

B. Boiler #6

Boiler #6 is a hydrogen gas-fired boiler with a design heat input of 181 mmBtu/hr. This boiler utilizes natural gas during start-up and shut-down of the boiler for flame stabilization purposes. Hydrogen gas, which is a byproduct of the plant's chlorine product process, is burned during normal operation. An analysis of the gaseous hydrogen fuel shows the fuel is made-up of hydrogen, nitrogen, oxygen and water vapor. Sulfur in not present in the fuel. Therefore, to satisfy the requirements of 45 CSR 10A, Natrium proposes to record the amount of natural gas and hydrogen burned in the unit on a monthly basis. These records will be kept on-site for a period of 5 years. In addition, a copy of the fuel analysis will also be maintained on-site.

C. Manufacturing Sources

Eagle Natrium LLC operates several sources which emit sulfur dioxide, including recovery operations, process furnaces, and flares. These sources are all subject to 45 CSR 10 and 45 CSR 10A. They are also covered under a Consent Order with the WVDEP – Office of Air Quality in conjunction with the Marshall County SO_2 State Implementation Plan. Eagle Natrium LLC feels that the terms and conditions of this Consent Order more than adequately meet all of the monitoring, recordkeeping and reporting requirements of 45 CSR 10A for manufacturing sources. Therefore, Eagle Natrium LLC – Natrium Plant is submitting a copy of the Consent Order as its proposed monitoring plan as required by 45 CSR 10, §6.2.

Revisions of Monitoring Plan:

Eagle Natrium LLC – Natrium Plant reserves the right to periodically revise the conditions of this monitoring plan. Any revised plan will become effective only after approval by the DAQ.

Implementation of Monitoring Plan:

Upon approval of this monitoring plan or any subsequent revisions to the plan, it is certain that a period of time will be necessary to implement new testing, monitoring, recordkeeping or reporting commitments. While some of the commitments will be implemented immediately, others may require a significant amount of implementation work (including training of personnel) that will not necessarily be undertaken until the plan has been approved by DAQ. Eagle Natrium LLC is proposing that the requirements under this initial monitoring plan be implemented during a period of 3 months after approval by DAQ with the actual effective date coinciding with the start of a quarterly reporting period. However, if the final monitoring plan requires significant equipment revisions or installation of new equipment, more time may be required. In any case, we ask that the DAQ work with Eagle Natrium LLC to reach a workable implementation date. Likewise, Eagle Natrium LLC is committed to working with the DAQ on a successful implementation.

APPENDIX B

Example Data Forms

Example Data Form I
CERTIFICATION OF DATA ACCURACY
(7.0 HCl; R13-2046)

I, the undersigned, hereby certify that all information contained in the attached _____, representing the period beginning _____ and ending _____, and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry.

Signature[1] _____ _____
(please use blue ink) Responsible Official or Authorized Representative Date

Name & Title _____ _____
(please print or type) Name Title

Telephone No._____ Fax No._____

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[1] This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

   (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), or

   (ii) the delegation of authority to such representative is approved in advance by the Director;

b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of U.S. EPA); or

d. The designated representative delegated with such authority and approved in advance by the Director.

Example Data Form II

Daily VOC Usage

(12.0 General; R13-1664)

Date_____

Product or Code Name	Gallons Used	Lbs VOC/Gallon	Lbs VOC
Total VOC:			

CERTIFICATION

I certify that the information shown above is true and accurate to the best of my knowledge and that I have made every reasonable effort to confirm such truth and accuracy.

_____

APPENDIX C

CAIR Permit Application

CAIR Permit Application

For sources subject to the Clean Air Interstate Rule Trading Programs under 45CSR39, 45CSR40 and 45CSR41, the West Virginia Department of Environmental Protection, Division of Air Quality has prepared this CAIR Permit Application. Please refer to sections 21 and 22 of 45CSR39, 45CSR40 and 45CSR41, as applicable.

This submission is: ☒ **New** ☐ **Revised**

STEP 1
Identify the source by plant name, and ORIS or facility code

Plant Name	West Virginia ID Number	ORIS/Facility Code
PPG Industries, Inc. - Natrium Plant	051-00002	50491

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO_x Annual	NO_x Ozone Season	SO_2 Annual
Unit 002 - Boiler #3		X	
Unit 001 - Boiler #4		X	
Unit 003 - Boiler #5		X	

STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO_2 source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO_2 unit (as applicable) required to have a Title V operating permit at the source shall:

(i) Submit to the Secretary a complete CAIR permit application under 45CSR§39-22, 45CSR§40-22 and 45CSR§41-22 (as applicable) in accordance with the deadlines specified in 45CSR§39-21, 45CSR§40-21 and 45CSR§41-21 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the Secretary determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO_2 source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO_2 unit (as applicable) required to have a Title V operating permit at the source shall have a CAIR permit issued by the Secretary under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in sections 80 through 88 of 45CSR39, 45CSR40 and 45CSR41, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO_2 source (as applicable) that is not otherwise required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO_2 unit (as applicable) that is not otherwise required to have a Title V operating permit are not required to submit a CAIR permit application and to have a CAIR permit, under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for such CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO_2 source (as applicable) and such CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO_2 unit (as applicable).

STEP 3, continued

(b) Monitoring, reporting and recordkeeping requirements.

(1) The owners and operators and the CAIR designated representative, of each CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO_2 source (as applicable) and each CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit and CAIR SO_2 unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO_2 source (as applicable) with the CAIR NO_X Annual emissions limitation, CAIR NO_X Ozone Season emissions limitation and CAIR SO_2 emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable).

(c) Nitrogen oxides annual emissions requirements.

(1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO_X Annual source and each CAIR NO_X Annual unit at the source shall hold, in the source's compliance account, CAIR NO_X Annual allowances available for compliance deductions for the control period under 45CSR§39-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.

(2) A CAIR NO_X Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter.

(3) A CAIR NO_X Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO_X Annual allowance was allocated.

(4) CAIR NO_X Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.

(5) A CAIR NO_X Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Annual Trading Program. No provision of the CAIR NO_X Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_X Annual allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO_X Annual allowance to or from a CAIR NO_X Annual source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO_X Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.

(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.

(3) A CAIR NO_X Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO_X Ozone Season allowance was allocated.

(4) CAIR NO_X Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.

(5) A CAIR NO_X Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Ozone Season Trading Program. No provision of the CAIR NO_X Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_X Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

(e) Sulfur dioxide annual emission requirements.

(1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO_2 allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.

(2) A CAIR SO_2 unit shall be subject to the requirements under 45CSR§41-6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.

(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under 45CSR§41-6.3.a, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.

(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with sections 51through 62, and 80 through 88 of 45CSR41.

(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR SO_2 allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 source's compliance account is incorporated automatically in any CAIR permit of the source.

STEP 3, continued

(f) Excess emissions requirements.

(1) If a CAIR NO_X Annual source emits nitrogen oxides during any control period in excess of the CAIR NO_X Annual emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO_X Annual unit at the source shall surrender the CAIR NO_X Annual allowances required for deduction under 45CSR§39-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR39, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(2) If a CAIR NO_X Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO_X Ozone Season emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under 45CSR§40-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR40, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(3) If a CAIR SO_2 source emits sulfur dioxide during any control period in excess of the CAIR SO_2 emissions limitation, then:

(i) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under 45CSR§41-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR41, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(g) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of a CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO_2 source (as applicable) and each CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit and CAIR SO_2 unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Secretary or the Administrator.

(i) The certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) for the CAIR designated representative for the source and each CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit and CAIR SO_2 unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable), provided that to the extent that sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program and CAIR SO_2 Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program and CAIR SO_2 Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program and CAIR SO_2 Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO_2 source (as applicable) and each CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit and CAIR SO_2 unit (as applicable) at the source shall submit the reports required under the CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program and CAIR SO_2 Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(h) Liability.

(1) Each CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO_2 source (as applicable) and each NO_X unit, CAIR NO_X Ozone Season unit and CAIR SO_2 unit (as applicable) shall meet the requirements of the CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program and CAIR SO_2 Trading Program (as applicable).

(2) Any provision of the CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program or CAIR SO_2 Trading Program (as applicable) that applies to a CAIR NO_X Annual source, CAIR NO_X Ozone Season source or CAIR SO_2 source (as applicable) or the CAIR designated representative of a CAIR NO_X Annual source, CAIR NO_X Ozone Season source or CAIR SO_2 source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_X Annual units, CAIR NO_X Ozone Season units or CAIR SO_2 units (as applicable) at the source.

(3) Any provision of the CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program or CAIR SO_2 Trading Program (as applicable) that applies to a CAIR NO_X Annual unit, CAIR SO_2 unit or CAIR NO_X Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit or CAIR SO_2 unit (as applicable) shall also apply to the owners and operators of such unit.

(i) Effect on Other Authorities.

No provision of the CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program and CAIR SO_2 Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41-5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO_2 source (as applicable) or CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit and CAIR SO_2 unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

PPG Industries, Inc. - Natrium Plant
Plant Name

STEP 3, continued

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

CAIR Designated Representative J. Thomas Horan, Manager, Environmental Control	
Signature J. Thomas Horan	Date 6/28/07