West Virginia Department of Environmental Protection
Division of Air Quality

Joe Manchin III
Governor

Stephanie R. Timmermeyer
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

PPG Industries, Inc.
Natrium Plant
R30-05100002-2006

John A. Benedict
Director

Issued: December 28, 2006 • Effective: January 11, 2007
Expiration: December 28 2011 • Renewal: June 28, 2011

Permit Number: **R30-05100002-2006**

Permittee: **PPG Industries, Inc.**

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; Tertiary 2865
UTM Coordinates:	512.70 km Easting • 4399.60 km Northing • Zone 17

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

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		Package Sewage Treatment Plant			
7.0. Monochlorobenzene (MCB) Dept. – Crystalizer System					
~~B018~~	~~E011~~	~~Para Room~~	~~—~~	~~—~~	~~NA~~
V040	E018	#2 Refined Para Transfer Tank	1997	9,950 gal	NA
~~V122~~	~~E122~~	~~#3 Refined Para Tank~~	~~1949~~	~~57,000 gal~~	~~NA~~
V123	E123	#1 Refined Para Tank	1947	24,000 gal	NA
V164	E164	#1 Crude Para Tank	1947	24,000 gal	NA
V174	E174	#2 Refined Para Tank	1947	155,000 gal	NA
V605	E605	#2 Crude Para Tank	1947	57,000 gal	NA
V622	E012	#1 Cryst. Ortho Tank	1974	8,400 gal	NA
V668	E015	Drainings Tank	---	8,400 gal	NA
V669	E014	#1 Refined Para Transfer Tank	1963	8,400 gal	NA
V670	E013	Sweatings Tank	1963	8,400 gal	NA
V985	E985	#1 Crystallizer Ortho Tank – Marshall Plant	1964	111,000 gal	NA
V991	E991	#2 Crystallizer Ortho Tank – Marshall Plant	1964	111,000 gal	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
V992	E992	#3 Crystallizer Ortho Tank – Marshall Plant	1964	111,000 gal	NA
CZ001	---	Crystalizer #1	---	---	NA
CZ002	---	Crystalizer #1	---	---	NA
CZ003	---	Crystalizer #1	---	---	NA
CZ004	---	Crystalizer #1	---	---	NA
CZ005	---	Crystalizer #1	---	---	NA
DY005	---	CaCl2 Dryer	---	---	NA
V041	E086	Spill Collection Tank	---	8,000 gal	NA
7.0. Monochlorobenzene (MCB) Dept. 7.0. Monochlorobenzene (MCB) Dept. – HCl System					
V144	#016	Scrubber Feed Tank	---	370 gal	NA
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
CL021	---	HCl Absorber	---	---	NA
CS071	---	#1 Gas Cooler	---	---	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
CS072	---	#2 Gas Cooler	---	---	NA
EV008	---	Still Line Evaporator	---	---	NA
KO007	---	Knockout Pot	---	---	NA
T090	---	Surge Tank	---	---	NA
SC013	---	HCl Scrubber	---	---	NA
SU004	E994	#1 HCl Synthesis Unit	2008	210	SC159
SC159	E994	#1 Tails Tower	2008	--	NA
V998	NA	#1 HCl Catch Tank	2008	472	NA
V997	E995	#1 HCl Transfer Tank	2008	528	SC160
SC160	E995	#1 HCl Transfer Tank Scrubber	2008	--	NA
SU005	E996	#2 HCl Synthesis Unit	2009	210 tpd	SC161
SC161	E996	#2 Tails Tower	2009	--	NA
V999	NA	#2 HCl Catch Tank	2009	528 gal	NA
7.0. Monochlorobenzene (MCB) Dept. – Loading					
LU053	Z053 and E098	Rail Transfer	---	---	SC018 (for HCl only)
LU054	Z054 and E023	Tank Truck Loading	---	---	SC023 (for HCl only)
LU056	Z056	Drum Loading	---	---	NA
LU057	Z057	Barge Loading	---	---	NA
SC018	E098	HCl Rail Car Scrubber	---	---	NA
7.0. Monochlorbenzene (MCB) Dept. – MCB					

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
LK003	Z058	MCB Unit Fugitives	---	---	NA
TP102	---	Blowdown Kettle	---	---	NA
V121	E121	#4 Benzene Tank	1947	500,000 gal	SC121
V158	E158	#2 Benzene Tank	1947	500,000 gal	SC158
CL012	---	Benzene Drying Still	---	---	NA
CL013	---	Corrosion Still	---	---	NA
CL014	---	Degassing Still	---	---	NA
CS068	---	Condenser	---	---	NA
CS069	---	Hot Condenser	---	---	NA
CS070	---	Ortho Condenser	---	---	NA
DR005	---	Benzene Drying Still Receiver	---	---	NA
DR006	---	Slop Drum	---	---	NA
DR007	---	Blowdown Kettle Receiver	---	---	NA
DY001	---	Oil Recovery Dryer	---	---	NA
DY002	---	$CaCl_2$ Dryer #1	---	---	NA
DY003	---	$CaCl_2$ Dryer #2	---	---	NA
TP103	---	#1 Chlorinator Add. Pot	---	---	NA
LU020	---	Barge Unloading	---	---	NA
RE015	---	#1 Chlorinator	---	---	NA
RE016	---	#2 Chlorinator	---	---	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
TP099	---	#2 Chlorinator Add. Pot	---	---	NA
TP100	---	#1 Sours Tank	---	2,300 gal	NA
TP101	---	#1 Sours Tank	---	2,300 gal	NA
SE010	---	Vacuum Jet	---	---	NA
7.0. Monochlorobenzene (MCB) Dept. – MCB Distillation System					
CL016	---	MCB Still	---	---	NA
DR008	---	CCB Surge Drum	---	---	SC011
V135	E135	#1 MCB Day Tank	1947	10,000 gal	NA
V136	E136	#2 MCB Day Tank	1947	10,000 gal	NA
V137	E137	#7 MCB River Tank	1947	500,000 gal	SC137
V166	E166	Crude DCB Tank Rerun	1947	24,000 gal	NA
V167	E167	Crude DCB Tank	1947	24,000 gal	NA
V157	---	Drying Still Water Separator	---	---	SC011
V609	---	Benzene Still Reflux Drum	---	---	SC011
SC011	---	Benzene Vent Scrubber	---	---	NA
SC012	---	Dichlor Vent Scrubber	---	---	NA
CL015	---	Benzene Still	---	---	NA
CL017	---	Dichlor Still	---	---	NA
DR009	---	Benzene Still Receiver	---	---	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
DR010	---	MCB Still Receiver	---	---	NA
DR011	---	Dichlor Still Receiver	---	---	NA
DY004	---	Dryer	---	---	NA
HE026	---	#1 MCB Economizer	---	---	NA
HE027	---	#2 MCB Economizer	---	---	NA
SE009	---	Vacuum Jet	---	---	NA
7.0. Monochlorobenzene (MCB) Dept. – Miscellaneous					
B017	---	CS2 Tote Bin	---	---	NA
FN016	---	Ammonia Compressor	---	---	NA
HW004	---	#1 Hot Well	---	---	NA
HW005	---	#2 Hot Well	---	---	NA
7.0. Monochlorobenzene (MCB) Dept. – Ortho & TCB System					
V140	E140	#2 TCB Tank	1947	5,700 gal	NA
V141	E141	#3 TCB Tank	1947	10,000 gal	NA
V165	E165	Crude Ortho Tank	1947	24,000 gal	NA
V177	E177	#1 Refined Ortho Tank	1948	24,000 gal	NA
V178	E178	#5 Refined Ortho Tank	1950	500,000 gal	NA
V970	E970	Ortho Cleanup Still Feed Tank	1974	13, 800 gal	NA

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
CL018	---	Ortho Cleanup Still	---	---	NA
CL019	---	Refined Ortho Still	---	---	NA
CL020	---	TCB Still	---	---	NA
DR012	---	Ortho Cleanup Still Receiver	---	---	NA
DR013	---	Refined Ortho Still Receiver	---	---	NA
DR014	---	TCB Still Receiver	---	---	NA
DY006	---	Dryer	---	---	NA
SE007	---	Crude Ortho Still Vacuum Jet	---	---	NA
SE008	---	TCB Still Vacuum Jet	---	---	NA
SE011	---	Refined Ortho Still Vacuum Jet	---	---	NA
TP104	---	Decolorizer	---	---	NA
7.0. Monochlorobenzene (MCB) Dept. – River Tank Stripper System					
SC121	E121	o-Dichlorobenzene Scrubber	---	---	NA
SC158	E158	o-Dichlorobenzene Scrubber	---	---	NA
SC137	E137	MCB Scrubber	---	---	NA
CL023	---	Stripper Still	---	---	NA
CS075	---	Cooler	---	---	NA
HE029	---	Vaporizer	---	---	NA
7.0. Monochlorobenzene (MCB) Dept. – Steam Stripper System					

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
~~CS074~~	~~—~~	~~Secondary Condenser~~	~~—~~	~~—~~	~~NA~~
~~IO409~~	~~—~~	~~Steam Stripper Effluent~~	~~—~~	~~—~~	~~NA~~
CS074	---	Secondary Condenser	---	---	NA
IO409	---	Steam Stripper Effluent	---	---	NA
SC014	---	Tail Gas Scrubber	---	---	NA
CA005	---	#1 Carbon Bed	---	---	NA
CA006	---	#2 Carbon Bed	---	---	NA
CL022	---	Steam Stripper	---	---	NA
CS073	---	Primary Condenser	---	---	NA
DY007	---	CaCl2 Dryer	---	---	NA
HE028	---	Economizer	---	---	NA
SP013	---	Phase Separator	---	---	NA
T091	---	Organic Collection Tank	---	---	NA
T092	---	Stripper Feed Tank	---	---	NA
8.0. Chlorine Dept. – Diaphragm Cells Chlorine Production					
CE001	Z017 E360	#5 Circuit – Chlorine Fugitives #5 Circuit – Emergency Chlorine Scrubbing	1951	160	NA SC009 Caustic Scrubber
CE002	Z017 E360	#6 Circuit – Chlorine Fugitives #6 Circuit – Emergency Chlorine Scrubbing	1955	194	NA SC009 Caustic Scrubber

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
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
8.0. Chlorine Dept. – Diaphragm Circuit Hydrogen Processing					
CE001	E007 E053 E055	#5 Circuit - Cell Room Seal (4) #5 Circuit - Atm Seal (1) #5 Circuit – Stack (1)	-----	-----	NA NA NA
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
CE001, CE002, CE003, CE004	E340, E341 E124	Clean Out Vents H_2 Product Vent	-----	-----	NA CA001 or CA002 Carbon Absorbers

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
8.0. Chlorine Dept. – No. 6 Circuit Diaphragm Cell Renewal					
SL014	E056	Fluffing and Glove Box	-----	-----	FF008 Filter
TP061	E036	Slurry Vacuum Tank	------	------	NA
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 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

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
T038	E108	Sulfuric Acid Tank #4	-----	1,850 gal	NA
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					
SL015	E048	Fluffing and Glove Box	-----	-----	Filter FF011
T078	E044	Vacuum Tank	-----	-----	Discharge Knockout Drum KO006
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

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
KO002	S001	Knockout Tank	1984	52,000 ACFM	SC001, SC002 Caustic Scrubbers
CY003	S001	Secondary Cyclone	1983	37,800 ACFM	SC001, SC002 Caustic Scrubbers
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					

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed/ Modified[1]	Design Capacity	Control Device[2]
CT003	Z016	Cooling Tower	1969	120,000 gal	NA
V023	E110	Acid Tank for Ph Control	1995	14,528 gal	SC019 Scrubber
V024	E110	Acid Tank for Ph Control	1995	14,528 gal	SC019 Scrubber
V706		Ammonia Storage Tank	1946	18,000 gal	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
12.0. Plant Paint Spray Booth					
PB001	E020, E021	Paint Spray Booth			FF013, FF014 Filter

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
R13-2046~~B~~ C	~~10/03/2008~~ 7/10/2009
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.

2.2 Acronyms

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

2.3 Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4 Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5 Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.
[45CSR§30-6.6.a.]

2.6 Administrative Permit Amendments

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

2.7 Minor Permit Modifications

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

2.8 Significant Permit Modification

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

2.9 Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10 Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

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

2.11 Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

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

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

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.
[45CSR§30-5.8.c.]

2.11.4 "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12 Reasonably Anticipated Operating Scenarios

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

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.
[45CSR§30-5.1.i.]

2.13 Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14 Inspection and Entry

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

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.
[45CSR§30-5.3.b.]

2.15 Schedule of Compliance

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

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

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.
[45CSR§30-5.3.d.]

2.16 Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17 Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

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

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the

emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

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

2.18 Federally-Enforceable Requirements

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

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19 Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20 Duty to Supplement and Correct Information

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

2.21 Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.
[45CSR§30-5.6.c.]

2.22 Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23 Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24 Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25 Acid Deposition Control

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

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.
[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA. **[45CSR§30-5.1.a.2.]**

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee 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 45CSR15]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4(a)(14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

3.1.8. **[40 C.F.R. 82, Subpart F]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. Part 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. **NO_X Budget Trading Program.** The permittee shall comply with the standard requirements set forth in the attached NO_X Budget Permit Application (see Appendix A) and the NO_X Budget Permit requirements set forth in 45CSR1 for each NO_X budget source. The complete NO_X Budget Permit Application shall be the NO_X Budget Permit portion of the Title V permit administered in accordance with 45CSR30.
[45CSR§§1-6.1.b. and 20.1.]

a. The NO_X Budget portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§1-2 and, upon recordation by the Administrator under 45CSR§1-50 through 45CSR§1-57 or 45CSR§1-60 through 45CSR§1-62, every allocation, transfer or deduction of a NO_X allowance to or from the compliance accounts of the NO_X Budget units covered by the permit or the overdraft account of the NO_X budget source covered by the permit.
[45CSR§1-23.2.]

b. Except as provided in 45CSR§1-23.2, the Secretary will revise the NO_X Budget portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.
[45CSR§1-24.1.]

3.1.10. 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.]

3.1.11. **CAIR NO_x Ozone Season Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (See Appendix D) 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.]

3.1.12. **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. NA

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.
[WV Code § 22-5-4(a)(15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.
[45CSR§30-5.1.c.2.A.; 45CSR13, R13-2046, 4.4.1.]

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.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

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

3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, 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

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

FAX: 304/926-0478

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

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

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on 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.

b. 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.

c. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

d. 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.]

e. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6 Compliance Plan

3.6.1. **NA**

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

a. **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*. Per 40 C.F.R.§63.160(b)(1), equipment to which 40 C.F.R. Part 63, Subpart H applies that are also subject to the provisions of 40 C.F.R. Part 60 will be required to comply only with the provisions of 40 C.F.R. Part 63, Subpart H.

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. PPG'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*. Per 40 C.F.R.§63.160(b)(1), equipment to which 40 C.F.R. Part 63, Subpart H applies that are also subject to the provisions of 40 C.F.R. Part 61 will be required to comply only with the provisions of 40 C.F.R. Part 63, Subpart H.

n. **40 C.F.R. 61, Subpart V** – *National Emission Standard for Equipment Leaks (Fugitive Emission Sources).* Same reason as 40 C.F.R. 61 Subpart J above.

o. **40 C.F.R. Part 61, Subpart Y** – *National Emission Standard for Benzene Emissions From Benzene Storage Vessels*. Group 1 benzene storage vessels subject to 40 C.F.R. Part 61, Subpart Y that are also subject to the provisions of 40 C.F.R. Part 63, Subpart G are required to comply only with the provisions of 40 C.F.R. Part 63, Subpart G.

p. **40 C.F.R. Part 61, Subpart FF** – *National Emission Standard for Benzene Waste Operations*. PPG is exempt from the control requirements of this subpart [because the facility's total annual benzene quantity (TAB) is less than 10 Mg/yr]. Per 40 C.F.R.§63.110(e) (1), the owner or operator of a Group 1 or Group 2 wastewater stream that is also subject to the provisions of 40 CFR part 61, subpart FF, may elect to comply with the provisions of 40 CFR part 63, subpart G, paragraphs (e)(1)(i) and (e)(1)(ii):

(i) Comply with the provisions of this subpart; and

(ii) For any Group 2 wastewater stream or organic stream whose benzene emissions are subject to control through the use of one or more treatment processes or waste management units under the provisions of 40 CFR part 61, subpart FF on or after December 31, 1992, comply with the requirements of this subpart for Group 1 wastewater streams.

Since PPG is exempt from the control requirements of 40 C.F.R. Part 61, Subpart FF, the last part of the above provision: (e)(1)(ii), does not apply, i.e., PPG needs only to comply with the provisions of 40 C.F.R. Part 63, Subpart G.

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 PPG is not required to certify compliance with them.

s. **45CSR26 – *Nox Budget Trading Program as a Means of Control and Reduction of Nitrogen Oxides from Electric Generating Units***

The coal-fired boilers No. 3 (243 MMBtu/hr), No. 4 (496 MMBtu/hr), and No. 5 (878 MMBtu/hr) are not classified as electric generating units (non-EGUs) in accordance with the definition of a electric generating unit in 40 C.F.R. §60.2. Further, these boilers do not serve a generator producing electricity for sale under a firm contract to the electric grid. Therefore, 45CSR26 is not applicable to these boilers.

t. 40C.F.R. Part63, Subpart NNNNN- *National Emission Standards for Hazardous Air Pollutants for Hydrochloric Acid Production.* PPG does have a hydrochloric acid production area that is subject to this Standard. However, #1and #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 (0.43 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.
[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. Reserved.

4.1.9. Total SO_2 emissions from Boiler Nos. 3, 4, and 5 shall not exceed 3767 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.]

4.1.10. 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.]**

4.1.11. 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.]**

4.1.12. 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.]**

4.1.13. 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.]**

4.1.14. *Compliance Schedule – 40 CFR Part 63, Subpart DDDDD.* Boilers No. 3, 4, 5, and 6 shall comply with all applicable requirements of 40 C.F.R. 63, Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters" no later than September 13, 2007 (which will be 3 years after the date of publication of the final rule in the Federal Register). An Initial Notification as described in 40 C.F.R. §63.7545(b) was submitted by the permittee to the USEPA, Region III, and the West Virginia DEP, DAQ before March 12, 2005, the 120th day after the date of publication of the final rule in the Federal Register. An eligibility demonstration for the HCl Health-Based Compliance Alternative as described in 40 C.F.R. 63, Subpart DDDDD, Appendix A was submitted by the permittee to the USEPA, Region III, and the West Virginia DEP, DAQ on September 11, 2006.

The permittee shall submit a complete application for a significant Title V permit modification to include the specific requirements of 40 C.F.R. 63, Subpart DDDDD and the parameters that define the affected source as eligible for the HCl health-based compliance alternative no later than March 13, 2008, 6 months after the compliance date. **[45CSR13, R13-1637, 4.1.6.; 45CSR34; 40 C.F.R. §§63.7495(b) and 63.7545(b)]**

4.2. Monitoring Requirements

4.2.1. Compliance with the visible emissions 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 B of this permit.
[45CSR§§2-3.2., 8.1a., 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.]

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., 8.1a., 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 B 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 4.1.12. and 4.1.13. 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 4.1.11. 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 4.1.12. and 4.1.13. 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, R14-027B, A.11.]**

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. Boilers 3 and 4 conducted compliance testing in the first quarter of 2006 and remain on testing Cycle 1 (annual frequency). Boiler 5 conducted compliance testing in January of 2005 and remains on testing Cycle 2 (two year frequency). All three boilers will need to be tested in 2007. 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.]

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 B) .
[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 B), 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 PPG'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 (30^{th}) 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, PPG'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 4.1.11. 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. NA

5.0. Requirements for Power Department Coal Handling, Emission Points: Z001, Z002, Z003, Z004, 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. NA

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. NA

5.6. Compliance Plan

5.6.1. NA

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. None.

7.0 Requirements for the MCB Department

In the event 40 C.F.R. Part 60, Subpart RRR and/or 40 C.F.R. Part 63, Subparts F, G, H, and/or NNNNN are revised during the term of the permit, the permittee shall comply with the applicable requirements in the most recently promulgated regulation(s) once it/they becomes effective.

7.1. Limitations and Standards.

7.1.1. Emissions to the atmosphere from the Monochlorobenzene (MCB) Process Area and Associated Equipment shall be limited as described in Table 7.1.1.

Table 7.1.1. Emission Limits for MCB Process Area and Associated Equipment

Emission Point	Pollutant	Emission Limit	
		pph	ppy
E002	Benzene Chlorobenzene m-DCB o-DCB p-DCB TCB	0.4463 10.2961 0.1120 0.1120 0.1120 0.0277	2815.17 33822.83 883.12 883.12 883.12 218.08
~~E011~~	~~p-DCB~~	~~4.48~~	~~5978.47~~
E012	m-DCB o-DCB p-DCB	1.46 0.54 2.02	214.66 77.64 274.04
E013	m-DCB o-DCB p-DCB	0.21 0.07 3.71	151.18 52.91 2630.58
E014	p-DCB	4.32	1934.25
E015	m-DCB o-DCB p-DCB	1.10 0.40 2.50	197.29 70.07 433.31
E016	Chlorobenzene	2.82	327.81
E018	p-DCB	4.33	1995.66
E022	HCl	~~0.29~~ 0.42	~~143.03~~ 254.18
E023	HCl	~~0.95~~ 1.08	~~255.48~~ 484.37
E121	Benzene	0.071	53.52
~~E122~~	p-DCB	~~5.75~~	8693.28
E174		8.39	
E123	p-DCB	8.61	3975.15
E135	Chlorobenzene	13.11	1663.32
E136	Chlorobenzene	13.11	1663.32
E137	Chlorobenzene	0.01	3.51
E139	TCB	0.09	22.12
E140	TCB	0.09	22.12
E141	TCB	0.09	23.31

Emission Point	Pollutant	Emission Limit	
		pph	ppy
E158	Benzene	0.07	53.52
E164	p-DCB	6.01	4507.66
E165	o-DCB p-DCB TCB	14.75 0.13 1.79	6460.7 54.42 7.42
E166	m-DCB o-DCB p-DCB TCB	0.24 3.24 9.54 0.003	226.02 3156.44 9274.47 3.12
E167	m-DCB o-DCB p-DCB TCB	0.24 3.24 9.54 0.003	226.02 3156.44 9274.47 3.12
E177	o-DCB p-DCB	4.17 0.03	227.43 1.55
E178	o-DCB p-DCB	4.34 0.04	466.95 3.11
E605	p-DCB	3.51	5990.75
E970	o-DCB p-DCB	3.50 24.15	135.15 774.13
E985	m-DCB o-DCB p-DCB	1.79 0.66 2.47	741.6 268.24 946.72
E986	TCB	0.12	13.56
E987	TCB	0.12	13.56
E988	TCB	0.12	13.56
E989	TCB	0.12	13.56
E990	TCB	0.12	13.56
E991	m-DCB o-DCB p-DCB	1.79 0.66 2.47	547.77 196.05 714.99
E992	m-DCB o-DCB p-DCB	1.79 0.66 2.47	547.77 196.05 714.99
E994	HCl	0.01	56.94
E995	HCl	~~0.01~~ 0.02	~~18.6~~ 37.2
E996	HCl	0.01	56.94

Emission Point	Pollutant	Emission Limit	
		pph	ppy
IO409	Benzene Chlorobenzene m-DCB o-DCB p-DCB TCB	0.0014 0.0041 0.001 0.002 0.002 0.0005	1.43 3.47 0.63 0.63 0.63 0.62
Z053 Z054 Z056 Z057	Chlorobenzene	12.2 29.47 2.26 49.12	8326.38
Z053 Z054	HCl	~~0.69~~ 0.86 ~~0.80~~ 0.97	~~293.71~~ 439.14
Z053 Z054 Z056	Crystal o-DCB	4.32 10.43 1.20	439.83
Z053 Z054 Z056 Z057	o-DCB	15.97 39.15 3.15 58.82	665.94
Z053 Z054 Z056	p-DCB	37.04 89.51 7.41	5772.38
Z053 Z054 Z056	TCB	0.37 0.89 0.14	75.43

[45CSR13, R13-2046, 4.1.1.]

7.1.2. Maximum annual tank throughputs shall be limited as described in Table 7.1.2. on a continuous rolling twelve (12) month basis.

Table 7.1.2. Annual Tank Throughput Limits

Emission Unit ID	Stored Material	Maximum Annual Throughput (Gallons per Year)
~~B018~~	~~p-DCB~~	~~5,983,069~~
V622	m-, o-, p-DCB	510,200
V670	m-, o-, p-DCB	10,768,021
V040, V669	p-DCB	6,711,405
V668	m-, o-, p-DCB	1,059,936
V144	Chlorobenzene	3,562,149
V121	Benzene	9,847,160
~~V122,~~ V174	p-DCB	5,752,358
V123	p-DCB	6,711,405
V135, V136	Chlorobenzene	9,678,580

Emission Unit ID	Stored Material	Maximum Annual Throughput (Gallons per Year)
V137	Chlorobenzene	6,628,710
V139, V141	TCB	238,751
V140	TCB	238,751
V158	Benzene	9,847,160
V164, V605	p-DCB	17,977,252
V165	o-, p-DCB, TCB	3,138,684
V166, V167	m-, o-, p-DCB	8,022,408
V177	o-, p-DCB	2,580,251
V178	o-, p-DCB	2,580,251
V187, V188	HCl	~~31,061,149~~ 46,768,527
V189, V190, V122	HCl	~~31,061,149~~ 46,768,527
V997	HCl	~~15,707,378~~ 31,414,756
V970	p-DCB	87,913
V985, V991, V992	m-, o-, p-DCB	341,539
V986, V987, V988, V989, V990	TCB	238,751

[45CSR13, R13-2046~~,~~ 4.1.2.]

7.1.3. Maximum annual transfer operation throughputs shall be limited as described in Table 7.1.3 on a continuous rolling twelve (12) month basis.

Table 7.1.3. Annual Transfer Operation Throughput Limits

Product to be Loaded	Emission Unit ID	Individual Maximum Annual Throughput (Gallons per Year)	Emission Factor (Pounds/10^3 Gallons)
Chlorobenzene	Z053 Z054 Z056 Z057	24,650,477 10,200,215 10,200,215 10,200,215	0.33778 0.81630 0.81630 0.81630
HCl	Z053 Z054	~~40,338,528~~ 56,045,906 ~~36,089,270~~ 51,796,648	~~0.00766~~ 0.00784 ~~0.00861~~ 0.00848
Crystal o-DCB	Z053 Z054 Z056	2,529,105 1,406,562 1,406,562	0.17391 0.31270 0.31270
o-DCB	Z053 Z054 Z056 Z057	10,959,895 2,592,789 3,628,760 6,044,153	0.06077 0.25685 0.18352 0.11018
p-DCB	Z053 Z054 Z056	7,990,586 2,905,557 2,905,557	0.72240 1.98667 1.98667

TCB	Z053 Z054 Z056	1,832,640 758,273 758,273	0.04116 0.09948 0.09948

[45CSR13, R13-2046~~,~~ 4.1.3.]

7.1.4. Vent emissions generated by the benzene storage tanks (V121 and V158) shall be controlled by the o-DCB scrubbers (SC121 and SC158, respectively) prior to release to atmosphere.
[45CSR13, R13-2046, 4.1.4.]

7.1.5. By-product HCl mist generated by the chlorination process shall be controlled by the gas coolers (CS071 and CS072), refrigerated HCl scrubber (SC013), HCl absorber (CL021), partial condenser (CS082), steam stripper (CL022), and the tail gas scrubber (SC014), prior to release to atmosphere.
[45CSR13, R13-2046, 4.1.5.]

7.1.6. Breathing and working losses generated by the benzene drying still water separator (DR005), the benzene still reflux drum (DR009), the CCB surge drum (DR008), and then MCB still reflux receiver (DR010), shall be controlled by the vent scrubber (SC011) prior to release to atmosphere.
[45CSR13, R13-2046, 4.1.6.]

7.1.7. Vent emissions generated by chlorobenzene storage tank (V137) shall be controlled by o-DCB scrubber (SC137) prior to release to atmosphere.
[45CSR13, R13-2046, 4.1.7.]

7.1.8. Emissions of HCl generated during MCB rail transfer operation (Z053) shall be controlled by HCl scrubber (SC018), having a minimum control efficiency of 99%, prior to release to atmosphere.
[45CSR13, R13-2046, 4.1.8.]

7.1.9. Emissions of HCl generated during MCB tank truck transfer operation (Z054) shall be controlled by HCl scrubber (SC023), having a minimum control efficiency of 99%, prior to release to atmosphere.
[45CSR13, R13-2046, 4.1.9.]

7.1.10. Breathing and working losses generated by HCl storage tanks (V187, V188, V189~~, and~~ V190, and V122) shall be controlled by the acid fume scrubbers (SC022 and SC023), having a minimum control efficiency of 99%, prior to release to atmosphere.
[45CSR13, R13-2046, 4.1.10.]

7.1.11. 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 in excess of the quantity given in Table 7.1.11 unless granted and exemption by the Director.

Table 7.1.11. Mineral Acid Concentration Limits

Mineral Acid	Allowable Stack Gas Concentration from Source Operations in Existence on July 1, 1970 (mg/m^3) @ STP	Allowable Stack Gas Concentration from Source Operations Installed After July 1, 1970 (mg/m^3) @ STP
Hydrochloric Acid Mist and/or Vapor	420	210

(Emission Unit SC014 - Tail Gas Scrubber, SU004-#1 HCl Synthesis Unit, SU005-#2 HCl Synthesis Unit) **[45CSR§7-4.2; 45CSR13, R13-2046, 4.1.11.]**

7.1.12. 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, 4.1.12.]

7.1.13. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in this permit or in the 45CSR27 Compliance Plan contained in consent orders CO-R27-91-18 and CO-R27-98-39A(91) 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, 4.1.13.; 45CSR§7-9.1.; 45CSR§27-12.1. (State-Enforceable only); CO-R27-91-18 (State-Enforceable only); CO-R27-98-39A(91) (State-Enforceable only)]

7.1.14. Reserved.

7.1.15. The permittee shall reduce emissions of TOC (less methane and ethane) by 98 weight-percent, or to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen, whichever is less stringent. *(Emission Unit: RE015 - #1 Chlorinator)*
[45CSR16; 40 C.F.R. §60.702(a)]

7.1.16. **Group 1 Storage Vessels (Closed Vent System and Control Device).** For each Group 1 storage vessel storing a liquid for which the maximum true vapor pressure of the total organic hazardous air pollutants in the liquid is less than 76.6 kilopascals, the owner or operator shall reduce hazardous air pollutants emissions to the atmosphere by operating and maintaining a closed vent system and control device in accordance with 7.1.16.1. through 7.1.16.5. *(Emission Units: V158 - #2 Benzene Tank, and V121 - #4 Benzene Tank)* **[45CSR13, R13-2046, 4.1.4.; 45CSR34; 40C.F.R. §§63.119(a)(1) and 63.119(e)]**

7.1.16.1. Except as provided in 7.1.16.2., the control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater. **[45CSR34; 40C.F.R. §63.119(e)(1)]**

7.1.16.2. If the owner or operator can demonstrate that a control device installed on a storage vessel on or before December 31, 1992 is designed to reduce inlet emissions of total organic HAP by greater than or equal to 90 percent but less than 95 percent, then the control device is required to be operated to reduce inlet emissions of total organic HAP by 90 percent or greater. **[45CSR34; 40C.F.R. §63.119(e)(2)]**

7.1.16.3. Periods of planned routine maintenance of the control device, during which the control devices does not meet the specifications of 7.1.16.1. and 7.1.16.2., as applicable, shall not exceed 240 hours per year. **[45CSR34; 40C.F.R. §63.119(e)(3)]**

7.1.16.4. The specifications and requirements of 7.1.16.1. and 7.1.16.2. for control devices do not apply during periods of planned routine maintenance. **[45CSR34; 40C.F.R. §63.119(e)(4)]**

7.1.16.5. The specifications and requirements of 7.1.16.1. and 7.1.16.2. for control devices do not apply during a control system malfunction. **[45CSR34; 40C.F.R. §63.119(e)(5)]**

(Emission Units: V158 - #2 Benzene Tank, and V121 - #4 Benzene Tank)

7.1.17. **Group 2 Storage Vessels.** For each Group 2 storage vessel, the owner or operator shall comply with the

recordkeeping requirements in 7.4.6. *(Emission Units: V040 - #2 Refined Para Transfer Tank, ~~V122 - #3 Refined Para Tank,~~ V123 - #1 Refined Para Tank, V135 - #1 MCB Day Tank, V136 - #2 MCB Day Tank, V137 - #7 MCB River Tank, V139 - #1 TCB Tank, V140 - #2 TCB Tank, V141 - #3 TCB Tank, V164 - #1 Crude Para Tank, V165 – Crude Ortho Tank, V166 – Crude DCB Rerun Tank, V167 – Crude DCB Tank, V174 - #2 Refined Para Tank, V177 - #1 Refined Ortho Tank, V178 - #5 Refined Ortho Tank, V605 - #2 Crude Para Tank, V622 - #1 Crystallizer Ortho Tank, V668 – Drainings Tank, V669 - #1 Refined Para Transfer Tank, V670 – Sweatings Tank, V970 – Ortho Cleanup Still Feed Tank, V985 - #1 Marshall (Crystallizer Ortho) Tank, V991 - #2 Marshall Plant (Crystallizer Ortho) Tank, V992 - #3 Marshall Plant (Crystallizer Ortho) Tank)* **[45CSR34; 40 C.F.R.63.119(a)(3)]**

7.1.18. **Group 2 Process Vents with a TRE index value greater than 1.0 but less than or equal to 4.0.** The owner or operator of a Group 2 process vent having a flow rate greater than or equal to 0.005 standard cubic meter per minute, a HAP concentration greater than or equal to 50 parts per million by volume, and a TRE index value greater than 1.0 but less than or equal to 4.0 shall maintain a TRE index value greater than 1.0**.** *(Emission Unit: SC014 – Tail Gas Scrubber*) **[45CSR34; 40C.F.R. §63.113(d)]**

7.1.19. **Group 2 Process Wastewater Streams.** For wastewater streams that are Group 2 for table 9 (40 C.F.R.63, Subpart G) compounds, the owner or operator shall comply with the recordkeeping requirements specified in 7.4.10. *(Emission Unit : IO 409 – Steam Stripper Effluent, SE007 – Crude Ortho Still Vacuum Jet, SE011 – Refined Ortho Still Vacuum Jet, SE008 – TCB Still Vacuum Jet)* **[45CSR34; 40 C.F.R. §63.132(a)(3)]**

7.1.20. **Group 2 Transfer Operations.** For each Group 2 transfer rack, the owner or operator shall maintain records as required in 7.4.11. *(Emission Unit : LU053 – MCB Rail Car Loading, LU054 – MCB Tank Truck Loading, LU056 – MCB Drum Loading, and LU057 – MCB Barge Loading)* **[45CSR34; 40 C.F.R. §63.126(c)]**

7.1.21. **Maintenance Wastewater.** Each owner or operator of a source subject to 40 C.F.R. 63, Subpart F shall comply with the requirements of 7.1.21.1 through 7.1.21.3. for maintenance wastewaters containing those organic HAP's listed in table 9 of 40 C.F.R. 63, Subpart G. **[45CSR34; 40 C.F.R. §63.105(a)]**

7.1.21.1. The owner or operator shall prepare a description of maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspection, maintenance, and repair (i.e., routine maintenance). The descriptions shall: **[45CSR34, 40 C.F.R. §63.105(b)]**

a. Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities. **[45CSR34, 40 C.F.R. §63.105(b)(1)]**
b. Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere; and: **[45CSR34, 40 C.F.R. §63.105(b)(2)]**
c. Specify the procedures to be followed when clearing materials from process equipment. **[45CSR34, 40 C.F.R. §63.105(b)(3)]**

7.1.21.2. The owner or operator shall modify and update the information required by 7.1.21.1. as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. **[45CSR34, 40 C.F.R. §63.105(c)]**

7.1.21.3. The owner or operator shall implement the procedures described in 7.1.21.1 and 7.1.21.2. as part of the start-up, shutdown, and malfunction plan required under 40 C.F.R. §63.6(e)(3). **[45CSR34, 40 C.F.R. §63.105(d)]**

7.1.22. **40 C.F.R. Part 63, Subpart H Requirements for Equipment Leaks.** The permittee shall comply with all applicable standards of 40 C.F.R. Part 63, Subpart H –"National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks" for the Monochlorobenzene (MCB) Process Area. The pertinent equipment leak standards include 40 C.F.R. §§63.162 (Standards: General), 63.163 (Standards: Pumps in light liquid service), 63.165 (Standards: Pressure relief devices in gas/vapor service), 63.166 (Standards: Sampling connection systems), 63.167 (Standards: Open-ended valves or lines), 63.168 (Standards: Valves in gas/vapor service and in light liquid service; instrumentation systems, and pressure relief devices in liquid service), 63.169 (Standards; Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service), 63.171 (Standards: Delay of repair), 63.172 (Standards: Closed-vent systems and control devices), 63.173 (Standards: Agitators in gas/vapor service and in light liquid service), and 63.174 (Standards: Connectors in gas/vapor service and in light liquid service). **[45CSR34; 40 C.F.R. Part 63, Subpart H; 40 C.F.R. §§63.162, 63.163, 63.165, 63.166, 63.167, 63.168, 63.169, 63.171, 63.172, 63.173, and 63.174; 45CSR§27-4.1 (State-Enforceable only); CO-R27-98-39A(91), II.1 (State-Enforceable only)]**

7.1.23. Emissions to the air of benzene from the emission points or sources listed below shall not exceed the following limitations:

Emission Point Source ID #	Benzene Emission Limit after BAT (TPY)
Fugitives	2.30
V-121 (#4 Benzene Tank)	0.04
V-158 (#2 Benzene Tank)	0.04
River Outfall	(0.31)
Total (Excluding River)	2.38

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

7.1.24. **45CSR27 Requirements for Equipment Leaks.** The permittee shall implement a Leak Detection and Repair Program ("LDAR") for equipment in TAP service. The LDAR program shall meet the requirements of 40 CFR 63 subpart H ("subpart H"). The permittee agrees to comply with the provision of subpart H [except as excluded by 45CSR§27-2.11.]. **[45CSR§§27-2.11., 4.1., 4.2., and 11.1. (State-Enforceable only); CO-R27-98-39A(91), II.1. (State-Enforceable only)]**

7.1.25. **Group 2 Process Vents with a TRE index value greater than 4.0.** The owner or operator of a Group 2 process vent with a TRE index value greater than 4.0 shall maintain a TRE index value greater than 4.0. *(SE007 – Crude Ortho Still Vacuum Jet, SE011 – Refined Ortho Still Vacuum Jet, SE008 – TCB Still Vacuum Jet)* **[45CSR34; 40 C.F.R. §63.113(e)]**

7.1.26. **Process vents.** For each emission stream from an HCl process vent at an existing source, the permittee shall reduce HCl emissions by 99 percent or greater or achieve an outlet concentration of 20 ppm by volume or less; and shall reduce Cl_2 emissions by 99 percent or greater or achieve an outlet concentration of 100 ppm by volume or less. *(Emission Unit: Tail Gas Scrubber (SC014); Emission Point: E002;*

Control Device: Tail Gas Scrubber (SC014)) **[45CSR34; 40 C.F.R. §63.9000(a) and Table 1 to 40 C.F.R. 63, Subpart NNNNN]**

7.1.27. **Storage tanks.** For each emission stream from an HCl storage tank at an existing source, the permittee shall reduce HCl emissions by 99 percent or greater or achieve an outlet concentration of 120 ppm by volume or less. These emission limits do not apply during periods of planned routine maintenance of HCl storage tank control devices. Periods of planned routine maintenance of each HCl storage tank control device, during which the control device does not meet these emission limits shall not exceed 240 hours per year. *(Emission Units: #1 HCl Tank (V187), #2 HCl Tank (V188), #3 HCl Tank (V189), #4 HCl Tank (V190) ; Emission Points: E022 and E023; Control Devices: #1 and #2 HCl Tanks Scrubber (SC022) and #3 and #4 HCl Tanks Scrubber (SC023))* **[45CSR34; 40 C.F.R. §§63.9000(a) and (d) and Table 1 to 40 C.F.R. 63, Subpart NNNNN]**

7.1.28. **Transfer operations.** For each emission stream from an HCl transfer operation at an existing source, the permittee shall reduce HCl emissions by 99 percent or greater or achieve an outlet concentration of 120 ppm by volume or less. *(Emission Units: Rail Transfer (LU053) and Tank Truck Loading (LU054); Emission Points: E098 and E023; Control Devices: HCl Rail Car Scrubber (SC018) and #3 and #4 HCl Tanks Scrubber (SC023))* **[45CSR34; 40 C.F.R. §63.9000(a) and Table 1 to 40 C.F.R. 63, Subpart NNNNN]**

7.1.29. **Equipment Leaks.** For each emission stream from leaking equipment in HCl service at existing and new sources, the permittee shall prepare and operate at all times according to an equipment LDAR plan that describes in detail the measures that will be put in place to detect leaks and repair them in a timely fashion. This plan was submitted to the Administrator as part of the Notification of Compliance Status dated November 17, 2006. **[45CSR34; 40 C.F.R. §63.9000(a) and Table 1 to 40 C.F.R. 63, Subpart NNNNN]**

7.1.30 The permittee shall maintain the daily average scrubber inlet liquid or recirculating liquid flow rate and the daily average scrubber effluent pH for each scrubber within the following operating parameter limits. These limits are taken from the original notification of compliance status (NOC) report submitted, December 5, 2006, as well as the NOC addendum approved May 13, 2008.

Table 7.1.5 – Scrubber Operating Limits

Scrubber	Minimum Liquid Flow Rate (gallons/min)	Scrubber Effluent pH	
		Minimum	Maximum
Tail Gas Scrubber (SC014)	20	3.0	10.0
#1 and #2 HCl Tanks Scrubber (SC022)	6	0.45	10.0
#3 and #4 HCl Tanks Scrubber (SC023)	6	0.45	10.0
HCl Rail Car Scrubber (SC018)	6	0.45	10.0

These operating limits may change as a result of subsequent compliance demonstrations as identified within 40 C.F.R. §63.9015. Should this become necessary the permittee shall submit an application for a minor Title V permit modification 7 days prior to implementing such change in accordance with 45CSR§30-6.5.a.5.

The compliance demonstration supporting any change to operating limits shall be submitted within 60 days after the completion of the performance test in accordance with 40 C.F.R. §63.9015(b) or within 15 calendar days after an operating limit change supported by a design evaluation 40 C.F.R. §63.9020(c) in accordance with 40 C.F.R. §63.9(j). The compliance demonstration shall be subject to approval at which time a finding of compliance will be made in accordance with 40 C.F.R. §63.6(f)(3).

If the related process change(s) create conflict with other operating permit terms or conditions, the overall process change may not qualify as a "Minor Modification" and the permittee could be subject to significant modification procedures, which require preapproval.
[45CSR§30-6.5., 45CSR34; 40 C.F.R. §§63.9000(b), 63.9020(e)(1) and (e)(3), 63.9030(b), and Table 2 to 40 C.F.R. 63, Subpart NNNNN; Notification of Compliance Status dated December 5, 2006]

7.1.31. The permittee shall be in compliance with the emission limitations and work practice standards in 40 C.F.R. 63, Subpart NNNNN at all times, except during periods of startup, shutdown, and malfunction. **[45CSR34; 40 C.F.R. §63.9005(a)]**

7.1.32. The permittee must always operate and maintain each affected source, including air pollution control and monitoring equipment, according to the provisions in 40 C.F.R. §63.6(e)(1)(i). **[45CSR34; 40 C.F.R. §63.9005(b)]**

7.1.33. The permittee shall develop a written startup, shutdown, and malfunction plan according to the provisions in 40 C.F.R. §63.6(e)(3). **[45CSR34; 40 C.F.R. §63.9005(c)]**

7.1.34. The permittee shall comply with all applicable requirements of the General Provisions of 40 C.F.R. §§63.1 through 63.15 as specified in Table 7 of 40 C.F.R. 63, Subpart NNNNN. **[45CSR34; 40 C.F.R. §63.9065(a) and Table 7 of 40 C.F.R. 63, Subpart NNNNN]**

7.1.35. Scrubbers SC022, SC023 and SC018 shall meet the following limits on a daily average basis:

7.1.35.1 Minimum influent water flow shall be at least 6 gallons per minute.

7.1.35.2 Scrubber effluent shall be maintained at a pH of between 0.45 and 10.

7.1.35.3 The scrubber shall be designed, installed, operated and maintained so as to reduce HCl emissions by at least 99% or to an outlet concentration of 120 ppm by volume or less.
[45CSR13, R13-2046, 4.1.16.]

7.1.36. ~~Scrubber 159 (the tails tower)~~ Scrubbers SC159 and SC161 (the tails towers) shall meet the following limits on a daily average basis:

7.1.36.1 The ratio of water flow to the scrubber and chlorine flow to the synthesis unit will be maintained at a minimum of 1.6 pound of water per pound of chlorine on a daily basis.

7.1.36.2 The scrubber shall be designed, installed, operated and maintained so as to reduce HCl emissions by at least 99.9%
[45CSR13, R13-2046, 4.1.17.]

7.1.37. Scrubber 160 shall meet the following limits on a daily average basis:

7.1.37.1 Water flow shall be at least 0.7 gallons per minute.

7.1.37.2 The scrubber shall be designed, installed, operated and maintained so as to reduce HCl emissions by at least 99.9%.
[45CSR13, R13-2046, 4.1.18.]

7.1.38. Emissions from the HCl synthesis units (emission points E994 and E996) shall not exceed the following:

Emission Point	Pollutant	Emission Limit	
		pph	ppy
E994	CO NO_x VOC PM	9.28 1.0 1.0 1.0	81,308.8 8,760 8,760 8,760
E996	CO NO_x VOC PM	9.28 1.0 1.0 1.0	81,308.8 8,760 8,760 8,760

[45CSR13, R13-2046, 4.1.19.]

7.1.39. **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 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, 4.1.20.]

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.
[45CSR13, R13-2046, 4.2.1.]

7.2.2. All chemical processing units shall be properly instrumented to alert the operator of process upsets, leaks, and other abnormal discharges of toxic air pollutants into the air and the operator shall record all such incidents and the associated emissions estimated from direct measurements of toxic air pollutant concentration and/or calculation using other process measurements.
[45CSR§27-3.4. (State-Enforceable only); 45CSR13, R13-2046, 4.2.2.]

7.2.3. **Group 1 Storage Vessels (Closed Vent System and Control Device**). To demonstrate compliance with 7.1.16. (storage vessel equipped with a closed vent system and control device) using a control device other than a flare, the owner or operator shall comply with the requirements in 7.2.3.1.through 7.2.3.6. **[45CSR13, R13-2046, 4.1.4.; 45CSR34; 40 C.F.R. §63.120(d)]**

7.2.3.1. The owner or operator shall prepare a design evaluation which shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device, including flow and organic HAP content under varying liquid level conditions. **[45CSR34; 40 C.F.R. §63.120(d)(1)(i)]**

7.2.3.2. The owner or operator shall submit, as part of the Notification of Compliance Status, a monitoring plan containing the information specified in 7.2.3.2.a. and 7.2.3.2.b.
[45CSR34; 40 C.F.R. §63.120(d) (2)]

a. A description of the parameter or parameters to be monitored to ensure that the control device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter (or parameters), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised); and **[45CSR34; 40 C.F.R. §63.120(d)(2)(i)]**

b. The documentation specified in 7.2.3.1.
[45CSR34; 40 C.F.R. §63.120(d)(2)(ii)]

7.2.3.3. The owner or operator shall submit, as part of the Notification of Compliance Status, the operating range for each monitoring parameter identified in the monitoring plan. The specified operating range shall represent the conditions for which the control device is being properly operated and maintained. **[45CSR34; 40 C.F.R. §63.120(d)(3)(i)]**

7.2.3.4. The owner or operator shall demonstrate compliance with the requirements of 7.1.16.3. (planned routine maintenance of a control device, during which the control device does not meet the specifications of 7.1.16.1. or 7.1.16.2, as applicable, shall not exceed 240 hours per year) by including in each Periodic Report the information specified in 40 C.F.R. §63.122 (g) (1). **[45CSR34; 40 C.F.R. §63.120(d)(4)]**

7.2.3.5. The owner or operator shall monitor the parameters specified in the Notification of Compliance Status or in the operating permit and shall operate and maintain the control device such that the monitored parameters remain within the ranges specified in the Notification of Compliance Status. **[45CSR34; 40 C.F.R. §63.120(d)(5)]**

7.2.3.6. Each closed vent system shall be inspected as specified in 40 C.F.R. §63.148. The initial and annual inspections required by 40 C.F.R. §63.148(b) shall be done during filling of the storage vessel. **[45CSR34; 40 C.F.R. §63.120(d)(6)]**

7.2.4. **Group 1 Storage Vessels (Closed Vent System and Control Device**). The owner or operator shall install a temperature monitoring device equipped with a continuous recorder for each Group 1, benzene storage tank scrubber. High temperature alarms shall alert operations when a scrubber is near the upper operating range of 140°F. The vapor feed flow rate to the scrubber shall be regulated by operations to reduce the temperature to within the normal operating range.

The following temperature range shall indicate proper operation of the o-DCB scrubbers.

Emission Point	Scrubber Exit Temperature Range °F
E121	< 140
E158	< 140

(Emission Units: V158 - #2 Benzene Tank, and V121 - #4 Benzene Tank)
[45CSR13, R13-2046, 4.1.4.; 45CSR34; 40 C.F.R.§63.120(d)(3)(i); Notice of Compliance Status Information dated September 16, 2003]

7.2.5. **Group 2 Process Vents with a TRE index value greater than 1.0 but less than or equal to 4.0**. To demonstrate compliance with 7.1.18. where a packed bed scrubber is used as a final recovery device, the owner or operator shall install monitoring devices equipped with continuous recorders to measure the outlet scrubbing liquid exit temperature and specific gravity. This monitoring equipment shall be installed, calibrated, and maintained according to the manufacture's specifications or other written procedures that provide adequate assurance that the equipment would reasonable be expected to monitor accurately.

The following temperature and specific gravity ranges shall indicate proper operation of the scrubber.

Emission Point	Measured Variable	Proper Operating Range
E002	Outlet Scrubbing Liquid Exit Temperature	< 140 °F
	Outlet Scrubbing Liquid Exit Specific Gravity	0.95 to 1.05

(Emission Unit: SC014 – Tail Gas Scrubber) **[45CSR34; 40C.F.R. §§63.114(b), 63.114(c), 63.114(e), 63.117(e), and 63.117(f); Notice of Compliance Status Information dated September 16, 2003]**

7.2.6. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately. For each monitoring system required in 40 C.F.R. 63, Subpart NNNNN, the permittee must develop, implement, and submit to the Administrator a site-specific monitoring plan that addresses the installation requirements in 7.2.6.1 through 7.2.6.3, the ongoing procedures in 7.2.6.4 through 7.2.6.6, and the requirements in 7.2.7. The permittee must submit the plan with the Notification of Compliance Status. Upon request of the Administrator, the permittee must promptly correct any deficiencies in a site-specific monitoring plan and submit the revised plan.

7.2.6.1. Installation of the continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).

7.2.6.2. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.

7.2.6.3. Performance evaluation procedures and acceptance criteria (e.g., calibrations).

7.2.6.4. Ongoing operation and maintenance (O&M) procedures in accordance with the general requirements of 40 C.F.R. §§63.8(c)(1), (3), (4)(ii), (7), and (8), and 40 C.F.R. §63.9025.

7.2.6.5. Ongoing data quality assurance procedures in accordance with the general requirements of 40 C.F.R. §63.8(d).

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

[45CSR34; 40 C.F.R. §63.9005(d)]

7.2.7. For each operating parameter that the permittee is required by 7.1.30 to monitor, the permittee shall install, operate and maintain each CMS according to the requirements in 7.2.7.1 through 7.2.7.6.

7.2.7.1. The permittee shall operate the CMS and collect data at all times the process is operating.

7.2.7.2. The permittee shall collect data from at least four equally spaced periods each hour.

7.2.7.3. For at least 75 percent of the operating hours in a 24-hour period, the permittee must have valid data (as defined in the site-specific monitoring plan) for at least 4 equally spaced periods each hour.

7.2.7.4. For each hour of valid data from at least four equally spaced periods, the permittee must calculate the hourly average value using all valid data or, where data are collected from an automated CMS, using at least one measured value per minute if measured more frequently than once per minute.

7.2.7.5. The permittee must calculate the daily average using all of the hourly averages calculated according to 7.2.7.4 for the 24-hour period.

7.2.7.6.. The permittee must record the results for each inspection, calibration, and validation check as specified in the site-specific monitoring plan.

[45CSR34; 40 C.F.R. §63.9025(a)]

7.2.8. 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 continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, or malfunction when the affected source is operating. A monitoring malfunction includes, but is not limited to, any sudden, infrequent, not reasonably preventable failure of the monitoring equipment to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[45CSR34; 40 C.F.R. §63.9035(d)]

7.2.9. The permittee shall demonstrate continuous compliance with each operating limit in 7.1.30 by collecting the scrubber inlet liquid or recirculating liquid flow rate, as appropriate, and effluent pH monitoring data according to 7.2.7, consistent with the permittee's monitoring plan; reducing the data to 1-hour and daily block averages according to the requirements in 7.2.7; maintaining the daily average scrubber inlet liquid or recirculating liquid flow rate, as appropriate, above the operating limit; and maintaining the daily average scrubber effluent pH within the operating limits. **[45CSR34; 40 C.F.R. §63.9040(b) and Table 5 of 40 C.F.R. 63, Subpart NNNNN]**

7.2.10. The permittee shall demonstrate continuous compliance with the equipment leak provisions in 7.1.29 by verifying that they continue to use an LDAR plan; and reporting any instances where the permittee deviated from the plan and the corrective actions taken. **[45CSR34; 40 C.F.R. §63.9040(b) and Table 5 of 40 C.F.R. 63, Subpart NNNNN]**

7.2.11. To demonstrate compliance with the TOC limit specified in 7.1.15. the temperature of the HCl leaving the HCl scrubber will be continuously monitored and maintained as to not exceed the 29°F to ensure proper operation of the recovery system. *(Emission Units: CS071 - #1 Gas Cooler; #2 Gas Cooler; SC013 – HCl Scrubber; KO007 – Knockout Pot; CL021 – HCl Absorber, CS082 – Absorber Partial Condenser)* **[45CSR16; 40 C.F.R. §§60/703(e)]**

7.2.12. In order to determine compliance with sections 7.1.35, 7.1.36 and 7.1.37 of this permit the permittee shall monitor and record water flow to the scrubbers at least once per eight hour shift.
[45CSR13, R13-2046, 4.2.3.]

7.3. Testing Requirements

7.3.1. **40 C.F.R. Part 63, Subpart H Testing Requirement for Equipment Leaks.** The permittee shall comply with all applicable test methods and procedures of 40 C.F.R. Part 63, Subpart H – "National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks" as specified in 40 C.F.R. §63.180 (Test methods and procedures). **[45CSR34; 40 C.F.R. Part 63, Subpart H; 40 C.F.R. §63.180]**

7.3.2. The permittee shall conduct all subsequent applicable performance tests according to the procedures in 40 C.F.R. §63.9020 on the earlier of the permittee's title V operating permit renewal or within 5 years of issuance of the permittee's title V permit. **[45CSR34; 40 C.F.R. §63.9015(a)]**

7.3.3. For the purpose of demonstrating compliance with 7.1.15., all affected facilities shall be run at full operating conditions and flow rates during any performance test. **[45CSR16; 40 C.F.R. §60.704(a)]**

7.3.4. The methods listed under 40 C.F.R. §60.704(b) in Appendix A to 40 C.F.R. Part 60, Subpart RRR, except as provided under 40 C.F.R. §60.8(b), shall be used as reference methods to determine compliance with the emission limit or percent reduction efficiency specified in 7.1.15. **[45CSR16; 40 C.F.R. §60.704(b)]**

7.3.5. In order to determine compliance with the NO_x emission limit in section 7.1.38 of this permit the permittee shall perform or have performed stack testing for the #1 HCl Synthesis Unit (SU994). Said testing shall be performed within 180 days of startup of the HCl burner.
[45CSR13, R13-2046, 4.3.1.]

7.4. Recordkeeping Requirements

7.4.1. The permittee shall maintain records of annual throughput for each tank listed in Table 7.1.2. Records shall be certified by a "Responsible Official" and maintained onsite for a period of not less than five (5) years. Such records shall be made available to the Director or his duly authorized representative upon request. An example data form is provided as Appendix C – Example Data Form I.
[45CSR13, R13-2046, ~~4.4.1.~~ 4.4.4.]

7.4.2. The permittee shall maintain records of annual throughput for each transfer operation listed in Table 7.1.3. Records shall be certified by a "Responsible Official" and maintained onsite for a period of not less than five (5) years. Such records shall be made available to the Director or his duly authorized representative upon request. An example data form is provided as Appendix C – Example Data Form II.
[45CSR13, R13-2046, ~~4.4.2.~~ 4.4.5.]

7.4.3. The permittee shall maintain records of calculations of the annual emissions for each transfer operation listed in Table 7.1.3. Records shall be certified by a "Responsible Official" and maintained onsite for a period of not less than five (5) years. Such records shall be made available to the Director or his duly authorized representative upon request. An example data form is provided as Appendix C – Example Data Form III.
[45CSR13, R13-2046, ~~4.4.3.~~ 4.4.6.]

7.4.4. The permittee shall maintain records of inspections required by Section 7.2.1. Records shall be certified by a "Responsible Official" and maintained onsite for a period of not less than five (5) years. Such records shall be made available to the Director or his duly authorized representative upon request.
[45CSR13, R13-2046, ~~4.4.4.~~ 4.4.7.]

7.4.5. Written records shall be maintained that identify all pumps, compressors, pressure relief valves, sampling connections, open-ended lines, and flanges of a chemical processing unit that are in toxic air pollutant service. These records shall record the results of all monitoring and inspections, emissions control measures applied and the nature, timing, and results of repair efforts.
[45CSR§27-10.3. (State-Enforceable only); 45CSR13, R13-2046, ~~4.4.5.~~ 4.4.8.]

7.4.6. **Group 1 and Group 2 Storage Vessels.** Each owner or operator of a Group 1 or Group 2 storage vessel shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These record shall be kept as long as the storage vessel retains Group 1 or Group 2 status and is in operation. (Emission Units: V040 - #2 Refined Para Transfer Tank, ~~V122 - #3 Refined Para Tank,~~ V123 - #1 Refined Para Tank, V135 - #1 MCB Day Tank, V136 - #2 MCB Day Tank, V137 - #7 MCB River Tank, V139 - #1 TCB Tank, V140 - #2 TCB Tank, V141 - #3 TCB Tank, V164 - #1 Crude Para Tank, V165 – Crude Ortho Tank, V166 – Crude DCB Rerun Tank, V167 – Crude DCB Tank, V174 - #2 Refined Para Tank, V177 - #1 Refined Ortho Tank, V178 - #5 Refined Ortho Tank, V605 - #2 Crude Para Tank, V622 - #1 Crystallizer Ortho Tank, V668 – Drainings Tank, V669 - #1 Refined Para Transfer Tank, V670 – Sweatings Tank, V970 – Ortho Cleanup Still Feed Tank, V985 - #1 Marshall (Crystallizer Ortho) Tank, V991 - #2 Marshall Plant (Crystallizer Ortho) Tank, V992 - #3 Marshall Plant (Crystallizer Ortho) Tank)
[45CSR34; 40 C.F.R. §63.123(a)]

7.4.7. **Group 2 Process Vents with a TRE index value greater than 1.0 but less than or equal to 4.0**. Each owner or operator using a recovery device or other means to achieve and maintain a TRE index value greater than 1.0 but less than 4.0 as specified in 7.1.18. shall keep the following records up-to-date and readily accessible. **[45CSR34; 40 C.F.R. §63.118(b)]**

7.4.7.1. Continuous records of the equipment operating parameters specified to be monitored under 7.2.5. and listed in table 4 of 40 C.F.R. 63, Subpart G. **[45CSR34; 40 C.F.R. §§63.118(b)(1)]**

7.4.7.2. Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in 40 C.F.R.§63.152(f). **[45CSR34; 40 C.F.R. §§63.118(b)(2)]**

(Emission Unit: SC014 – Tail Gas Scrubber)

7.4.8. **Group 2 Process Vents with a TRE index value greater than 1.0 but less than or equal to 4.0.** Each owner or operator subject to the provisions for Group 2 process vents with a TRE index value greater than 1.0 but less than or equal to 4.0 in 7.1.18. shall: **[45CSR34; 40 C.F.R. §63.117(a)]**

7.4.8.1. Keep an up-to-date, readily accessible record of the data specified in 7.4.8.1.a and 7.4.8.1.b, submitted as part of the Notification of Compliance Status report dated September 16, 2003. **[45CSR34; 40 C.F.R. §§63.117(a)(1) and (2)]**

a. The exit temperature of the absorbing liquid and exit specific gravity, as specified in table 4 of 40 C.F.R. 63, Subpart G, and averaged over the same time period of the measurements of vent stream flow rate and concentration used in the TRE determination (both measured while the vent steam is normally routed and constituted), and **[45CSR34; 40 C.F.R. §63.117(a)(7)(i)]**
b. The measurements and calculations performed to determine the TRE index value of the vent stream. **[45CSR34; 40 C.F.R. §63.117(a)(7)(ii)]**

(Emission Unit: SC014 – Tail Gas Scrubber)

7.4.9. **Group 2 Process Vents.** Each owner or operator subject to the provisions of 40 C.F.R. 63, Subpart G and who elects to demonstrate compliance with the TRE index value greater than 1.0 under 7.1.18. shall keep up-to-date, readily accessible records of: **[45CSR34; 40 C.F.R. §63.118(c)]**

7.4.9.1. Any process changes as defined in 40 C.F.R. §63.115(e). **[45CSR34; 40 C.F.R. §63.118(c)(1)]**

7.4.9.2. Any recalculation of the TRE index value pursuant to 40 C.F.R. §63.115(e). **[45CSR34; 40 C.F.R. §63.118(c)(2)]**

(Emission Unit: SC014 – Tail Gas Scrubber; SE007 – Crude Ortho Still Vacuum Jet; SE011 – Refined Ortho Still Vacuum Jet; SE008 – TCB Still Vacuum Jet)

7.4.10. **Group 2 Process Wastewater Streams.** The owner or operator shall keep in a readily accessible location the records specified in 7.4.10.1 through 7.4.10.4. **[45CSR34; 40 C.F.R. §63.147(b)(8)]**

7.4.10.1. Process unit identification and description of the process unit. **[45CSR34; 40 C.F.R. §63.147(b)(8)(i)]**

7.4.10.2. Stream identification code. **[45CSR34; 40 C.F.R. §63.147(b)(8)(ii)]**

7.4.10.3. For existing sources, concentration of table 9 (40 C.F.R. 63, Subpart G) compound(s) in parts per million, by weight. Include documentation of the methodology used to determine the concentration. **[45CSR34; 40 C.F.R. §63.147(b)(8)(iii)]**

7.4.10.4. Flow rate in liter per minute. **[45CSR34; 40 C.F.R. §63.147(b)(8)(iv)]**

(Emission Unit : IO 409 – Steam Stripper Effluent, SE007 – Crude Ortho Still Vacuum Jet, SE011 – Refined Ortho Still Vacuum Jet; SE008 – TCB Still Vacuum Jet)

7.4.11. **Group 2 Transfer Operations.** Each owner or operator of a Group 2 transfer rack shall record, update annually, and maintain the information specified in 7.4.11.1 through 7.4.11.3 in a readily accessible location on site. **[45CSR34; 40 C.F.R. §63.130(f)]**

7.4.11.1. Analysis demonstrating the design and actual annual throughput of the transfer rack; **[45CSR34; 40 C.F.R. §63.130(f)(1)]**

7.4.11.2. An analysis documenting the weight-percent organic HAP's in the liquid loaded. Examples of acceptable documentation include but are not limited to analyses of the material and engineering calculations. **[45CSR34; 40 C.F.R. §63.130(f)(2)]**

7.4.11.3. An analysis documenting the annual rack weighted average HAP partial pressure of the transfer rack**. [45CSR34; 40 C.F.R. §63.130(f)(3)]**

a. For Group 2 transfer racks that are limited to transfer of organic HAP's with partial pressures less than 10.3 kilopascals, documentation is required of the organic HAP's (by compound) that are transferred. The rack weighted average partial pressure does not need to be calculated. **[45CSR34; 40 C.F.R. §63.130(f)(3)(i)]**

b. For racks transferring one or more organic HAP's with partial pressures greater than 10.3 kilopascals, as well as one or more organic HAP's with partial pressures less than 10.3 kilopascals, a rack weighted partial pressure shall be documented. The rack weighted average HAP partial pressure shall be weighted by the annual throughput of each chemical transferred. **[45CSR34; 40 C.F.R. §63.130(f)(3)(ii)]**

(Emission Unit : LU053 – MCB Rail Car Loading, LU054 – MCB Tank Truck Loading, LU056 – MCB Drum Loading, and LU057 – MCB Barge Loading)

7.4.12. **Group 1 Storage Vessels (Closed Vent System and Control Device).** The permittee shall keep in a readily accessible location a record of the planned routine maintenance performed on the control device including the duration of each time the control device does not meet the specifications of 7.1.16.1. and 7.1.16.2., as applicable, due to the planned routine maintenance. Such record shall include the information specified in 7.4.12.1. and 7.4.12.2**. [45CSR§13, R13-2046, 4.1.4.; 45CSR34; 40 C.F.R. §§63.123(f) and 63.123(f)(2)]**

7.4.12.1. The first time of day and date the requirements of 7.1.16.1. or 7.1.16.2., as applicable, were not met at the beginning of the planned routine maintenance, and **[45CSR34; 40 C.F.R. §63.123(f)(2)(i)]**

7.4.12.2. The first time of day and date the requirements of 7.1.16.1. or 7.1.16.2., as applicable, were met at the conclusion of the planned routine maintenance**. [45CSR34; 40 C.F.R. §63.123(f)(2)(ii)]**

(Emission Units: V158 - #2 Benzene Tank, and V121 - #4 Benzene Tank)

7.4.13. **40 C.F.R. Part 63, Subpart H Recordkeeping Requirements for Equipment Leaks.** The permittee shall comply with all applicable recordkeeping requirements of 40 C.F.R. Part 63, Subpart H – "National Emission

Standards for Organic Hazardous Air Pollutants for Equipment Leaks" as specified in 40 C.F.R. §63.181 (Recordkeeping requirements.) for the Monochlorobenzene (MCB) Process Area**. [45CSR34; 40 C.F.R. Part 63, Subpart H; 40 C.F.R. §63.181]**

7.4.14. **Group 2 Process Vents with a TRE index value greater than 4.0.** The owner or operator of a Group 2 process vent with a TRE index value greater than 4.0 as specified in 7.1.25, shall maintain records of measurements, engineering assessments, and calculations performed to determine the TRE index value of the vent stream, and submitted as part of the Notification of Compliance Status report dated September 16, 2003. Documentation of engineering assessments shall include all data, assumptions, and procedures used for the engineering assessments, as specified in 40 C.F.R. §63.115(d)(1). *(SE007 – Crude Ortho Still Vacuum Jet, SE011 – Refined Ortho Still Vacuum Jet, SE008 – TCB Still Vacuum Jet)* **[45CSR34; 40 C.F.R. §63.117(b)]**

7.4.15. The permittee shall keep the records specified in 7.4.15.1 and 7.4.15.2.

7.4.15.1. Records of daily average scrubber inlet liquid or recirculating liquid flow rate, as appropriate.

7.4.15.2. Records of the daily average scrubber effluent pH.

[45CSR34; 40 C.F.R. §63.9035(b)]

7.4.16. The permittee may not use data recorded during monitoring malfunctions (as defined in 7.2.8), associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, nor may such data be used in fulfilling a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system. [**45CSR34; 40 C.F.R. §63.9035(e)]**

7.4.17. The permittee shall keep a copy of each notification and report submitted to comply with 40 C.F.R. 63, Subpart NNNNN, including all documentation supporting any initial Notification or Notification of Compliance Status submitted, as required in 40 C.F.R. §63.10(b)(2)(xiv). **[45CSR34; 40 C.F.R. §63.9055(a)]**

7.4.18. The permittee must also keep the following records:

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

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

7.4.18.3. Records of operating parameter values that are consistent with the permittee's monitoring plan.

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

7.4.18.5. Copies of the current versions of the site-specific monitoring plan and the equipment LDAR plan. The permittee must also submit copies of these plans and any revisions or updates to the Administrator for comment only (not for approval).

7.4.18.6. Records of the planned routine maintenance performed on each HCl storage tank control device including the duration of each time the control device does not meet the emission limits in 7.1.27 due to planned routine maintenance. Such a record shall include the information specified in 7.4.18.6.a through 7.4.18.6.b.

a. The first time of day and date the emission limits in 7.1.27 were not met at the beginning of

the planned routine maintenance, and

b. The first time of day and date the emission limits in 7.1.27 were met at the conclusion of the planned routine maintenance.

[45CSR34; 40 C.F.R. §63.9055(b)]

7.4.19. 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). **[45CSR34; 40 C.F.R. §63.9060(a)]**

7.4.20. 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. **[45CSR34; 40 C.F.R. §63.9060(b)]**

7.4.21. The permittee must keep each record on site, or readily accessible from on site through a computer or other means, 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). Records may be kept off site for the remaining 3 years. Records may be maintained in hard copy or computer-readable format including, but not limited to, on paper, microfilm, hard disk drive, floppy disk, compact disk, magnetic tape, or microfiche. **[45CSR34; 40 C.F.R. §63.9060(c)]**

7.4.22. The permittee must keep each previous (i.e., superseded) version of the site-specific monitoring plan and the LDAR plan for a period of 5 years after revision of the plan. If, at any time after adoption of a site-specific monitoring plan or an LDAR plan, the affected source ceases operation or is otherwise no longer subject to the provisions of 40 C.F.R. 63, Subpart NNNNN, the permittee must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to 40 C.F.R. 63, Subpart NNNNN. **[45CSR34; 40 C.F.R. §63.9060(d)]**

7.4.23. If an owner or operator elects at a later date to use an alternative provision of 40 C.F.R. §60.702 with which he or she will comply, then the Administrator shall be notified by the owner or operator 90 days before implementing a change and, upon implementing the change, a performance test shall be performed as specified by 40 C.F.R. §60.704 no later than 180 days from initial start-up. **[45CSR16; 40 C.F.R. §60.705(a)]**

7.4.24. Each owner or operator subject to the provisions of 40 C.F.R. Part 60, Subpart RRR shall keep an up-to-date, readily accessible record of the data specified in 7.2.11. measured continuously and measured during each performance test, and also include the data in the report of the initial performance test required under 40 C.F.R. §60.8. The same data specified in this section shall be submitted in the reports of all subsequently required performance tests where either the emission control efficiency of a combustion device, outlet concentration of TOC, or the TRE index value of a vent stream from a recovery system is determined. **[45CSR16; 40 C.F.R. §60.703(e)]**

7.4.25. Record of Maintenance of Air Pollution Control Equipment. For all pollution control equipment listed in Section 1.0, Subsection 7.0. (Monochlorobenzene (MCB) Dept.) – HCl System, Loading, MCB; MCB Distillation System- the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures. **[45CSR13, R13-2046, 4.4.2.]**

7.4.26. Record of Malfunctions of Air Pollution Control Equipment. For all air pollution control equipment listed in Section 1.0, 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. The emission to the air of any toxic air pollutant resulting from an abnormal release or spill in excess of the following amounts shall be reported to the Director or his authorized representative not later than 24-hours after the chemical processing unit owner/operator has knowledge of such emission:

- For ethylene oxide, and vinyl chloride, one (1) pound
- For acrylonitrile and butadiene, ten (10) pounds
- For all other toxic air pollutants, fifty (50) pounds.

The owner or operator shall file a written report with the Director stating the details of all such incidents resulting in the emission of more than fifty (50) pounds of any toxic air pollutant within seven (7) days of the occurrence. The owner/operator shall submit to the Director, at his request, records of all abnormal toxic air pollutant discharges to the air.
[45CSR§27-10.4. (State-Enforceable only); 45CSR13, R13-2046, 4.5.1.]

7.5.2. Any period of failure or inoperability of air pollution control equipment required by 45CSR§27 shall be reported to the Director not later than 24-hours after the owner/operator has knowledge of such failure. Such reports shall be made in conjunction with necessary requests for variances as provided under Section 7.1.13.
[45CSR§27-10.5. (State-Enforceable only); 45CSR13, R13-2046, 4.5.2.]

7.5.3. The permittee shall submit Periodic Reports as described in 40 C.F. R. §63.152(c). **[45CSR34; 40 C.F.R. §§63.152(a)(4) and 63.152(c)]**

7.5.4. The permittee shall submit reports of start-up, shutdown, and malfunction required by 40 C.F.R. §63.10(d)(5). The start-up, shutdown and malfunction reports may be submitted on the same schedule as the Periodic Reports required under 40 C.F.R. §63.152(c). **[45CSR34; 40 C.F.R. §§63.152(a)(5) and 63.152(d)(1)]**

7.5.5. **Group 1 Storage Vessels (Closed Vent System and Control Device).** An owner or operator who elects to comply with 7.16.3. by installing a closed vent system and control device (non-flare) shall submit, as part of the next Periodic Report required by 40 C.F.R. §152(c), the information specified in 7.5.5.1. through 7.5.5.2**.**
[45CSR13, R13-2046, 4.1.4. 45CSR34; 40C.F.R. §§63.122(g) and 63.152(c)]

7.5.5.1. As required by 7.2.3.4., the Periodic Report shall include the information specified in 7.5.5.1.a. and 7.5.5.1.b. for those planned routine maintenance operations that would require the control device not to meet the requirements of 7.1.16.1. and 7.1.16.2., as applicable. **[45CSR34; 40C.F.R. §§63.122(g) and 63.152(c)]**

a. A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods. **[45CSR34, 40 C.F.R. §63.122(g)(1)(i)]**

b. A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of 7.1.16.3. or 7.1.16.2., as applicable, due to planned routine maintenance. **[45CSR34, 40 C.F.R. §63.122(g)(1)(ii)]**

7.5.5.2. If a control device other than a flare is used, the Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with 40 C.F.R. §63.120(d)(3)(i). The description shall include the information specified in 7.5.5.2.a. and 7.5.5.2.b. **[45CSR34; 40 C.F.R. §63.122(g)(2)]**

a. Identification of the control device for which the measured parameters were outside of the established ranges, and **[45CSR34; 40 C.F.R. §63.122(g)(2)(i)]**

b. Cause for the measured parameters to be outside of the established ranges. **[45CSR34; 40 C.F.R. §63.122(g)(2)(ii)]**

(Emission Units: V158 - #2 Benzene Tank, and V121 - #4 Benzene Tank)

7.5.6. **Group 2 Process Vents with a TRE index value greater than 1.0 but less than or equal to 4.0.** The permittee shall submit to the Administrator Periodic Reports of the following recorded information according to the schedule in 40 C.F.R. §63.152. **[45CSR34; 40 C.F.R. §63.118(f)]**

7.5.6.1. Reports of daily average values of monitored parameters for all operating days when the daily average values recorded under 7.4.8. were outside the ranges established in the Notification of Compliance Status submitted on September 16, 2003 and specified in 7.2.5. **[45CSR34; 40 C.F.R. §63.118(f)(1)]**

(Emission Unit: SC014 – Tail Gas Scrubber)

7.5.7. **Group 2 Process Vents with a TRE index value greater than 1.0 but less than or equal to 4.0.** If any subsequent TRE determinations or performance tests are conducted after submittal of the Notification of Compliance Status on September 16, 2003, the data in 7.4.8.1.a and 7.4.8.1.b shall be reported in the next Periodic Report as specified in 40 C.F.R. §63.152(c). *(Emission Unit: SC014 – Tail Gas Scrubber)* **[45CSR34; 40 C.F.R. §63.117(a)(3)]**

7.5.8. **Group 2 Process Vents.** Whenever a process change, as defined in 40 C.F.R. §63.115(e), is made that causes a Group 2 process vent to become a Group 1 process vent, the owner or operator shall submit a report within 180 calendar days after the process change as specified in 40 C.F.R. §63.151(j). The report shall include: **[45CSR34; 40 C.F.R. §63.118(g)]**

7.5.8.1. A description of the process change; **[45CSR34; 40 C.F.R. §63.118(g)(1)]**

7.5.8.2. The results of the recalculation of the flow rate, organic HAP concentration, and TRE index value

required under 40 C.F.R. §63.115(e) and recorded under 7.4.9.; and **[45CSR34; 40 C.F.R. §63.118(g)(2)]**

7.5.8.3. A statement that the owner or operator will comply with the provisions of 40 C.F.R. §63.113 for Group 1 process vents by the dates specified in 40 C.F.R. 63, Subpart F. **[45CSR34; 40 C.F.R. §63.118(g)(3)]**

(Emission Unit: SC014 – Tail Gas Scrubber; SE007 – Crude Ortho Still Vacuum Jet; SE011 – Refined Ortho Still Vacuum Jet; SE008 – TCB Still Vacuum Jet)

7.5.9. **40C.F.R. Part 63, Subpart H Reporting Requirements for Equipment Leaks.** The permittee shall comply with all applicable reporting requirements of 40 C.F.R. Part 63, Subpart H – "National Emission Standards for Organic Hazardous Air pollutants for Equipment Leaks" as specified in 40 C.F.R. §63.182 (Reporting requirements.) for the Monochlorobenzene (MCB) process area**. [45CSR34; 40 C.F.R. 63, Subpart H; 40 C.F.R. §63.182]**

7.5.10. **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)]

7.5.11. **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)]

7.5.12. **Group 2 Process Vents with a TRE index value greater than 4.0.** Whenever a process change as defined in 40 C.F.R. §63.115(e), is made that causes a Group 2 process vent with a TRE greater than 4.0 to become a Group 2 process vent with a TRE less than 4.0, the owner or operator shall submit a report within 180 calendar days after the process change. The report may be submitted as part of the next periodic report. The report shall include: **[45CSR34; 40 C.F.R. §63.118(h)]**

7.5.12.1. A description of the process change, **[45CSR34; 40 C.F.R. §63.118(h)(1)]**

7.5.12.2. The results of the recalculation of the TRE index value required under 40 C.F.R. §63.115(e) and recorded under 7.4.9., **[45CSR34; 40 C.F.R. §63.118(h)(2)]**

7.5.12.3. A statement that the owner or operator will comply with the requirements specified in 40 C.F.R. §63.113(d). **[45CSR34; 40 C.F.R. §63.118(h)(3)]**

(SE007 – Crude Ortho Still Vacuum Jet, SE011 – Refined Ortho Still Vacuum Jet, SE008 – TCB Still Vacuum Jet)

7.5.13. The permittee shall report the results of subsequent performance tests conducted in accordance with 7.3.2. within 60 days after the completion of the test. This report should also verify that the operating limits for the affected source have not changed or provide documentation of revised operating limits established as specified

in Table 2 of 40 C.F.R. 63, Subpart NNNNN. The reports for all subsequent performance tests should include all applicable information required in 40 C.F.R. §63.9050. **[45CSR34; 40 C.F.R. §63.9015(b)]**

7.5.14. The permittee must report each instance in which they did not meet an emission limit, work practice standard or operating limit in Table 1 or 2 of 40 C.F.R. 63, Subpart NNNNN as specified in 7.1.26, 7.1.27, 7.1.28, 7.1.29, and 7.1.30. This includes periods of startup, shutdown, and malfunction. These instances are deviations from the emission limitations and must be reported according to the requirements of 7.5.15. and 7.5.16. 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 Administrator's satisfaction that they were operating in accordance with 40 C.F.R. §63.6(e)(1). The Administrator 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). **[45CSR34; 40 C.F.R. §§63.9040(c) and (e)]**

7.5.15. The permittee shall submit a compliance report that includes the information in 40 C.F.R. §63.9050(c) through (e) as well as the information in Table 6 of 40 C.F.R. 63, Subpart NNNNN. Unless the Administrator has approved a different schedule for submission of reports under 40 C.F.R. §63.10(a), the permittee shall submit each report according to the schedule specified in 40 C.F.R. §§63.9050(b)(1) through (5). **[45CSR34; 40 C.F.R. §§63.9050(a), (b), (c), (d), and (e)]**

7.5.16. For each startup, shutdown, or malfunction during the reporting period that is not consistent with the permittee's startup, shutdown, and malfunction plan, the permittee must submit an immediate startup, shutdown and malfunction report. Unless the Administrator has approved a different schedule for submission of reports under 40 C.F.R. §63.10(a), the permittee shall submit each report according to 40 C.F.R. §§63.9050(f)(1) and (2). **[45CSR34; 40 C.F.R. §63.9050(f)]**

7.5.17. Each owner or operator subject to the provisions of 40 C.F.R. 60, Subpart RRR is exempt from the quarterly reporting requirements contained in 40 C.F.R. §60.7(c) of the General Provisions. **[45CSR16; 40 C.F.R. §705(k)]**

7.6 Compliance Plan

7.6.1 NA

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. None.

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., the permittee shall monitor: 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). **[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. Records of the operating data required by 9.2.1. shall be maintained for a period of at least five (5) years in accordance with 3.4.2. **[45CSR§30-5.1.c.]**

9.5. Reporting Requirements

9.5.1. NA

9.6. Compliance Plan

9.6.1. NA

10.0 Requirements for Caustic Department: Emission Points E110 – HCl Tank Vent Scrubber (SC019)

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)

10.2. 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 water flow rate to the HCl tank vent scrubber, 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. **[45CSR§30-5.1.c.]**

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. Records of the operating data required by 10.2.1. shall be maintained for a period of at least five (5) years in accordance with 3.4.2. **[45CSR§30-5.1.c.]**

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 for a period of at least five (5) years in accordance with 3.4.2. **[45CSR§30-5.1c.]**

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

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 C, Example Data Form IV) showing VOC daily usage and monthly cumulative usage shall be recorded and maintained for the most recent five (5) year period in accordance with 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 for a period no less than five (5) years in accordance with 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. **[45CSR§30-5.1.c]**

12.5. Reporting Requirements

12.5.1. NA

12.6. Compliance Plan

12.6.1. NA

APPENDIX A

NOx Budget Permit Application

NO_x Budget Permit Application

DAQ
Division of Air Quality

The West Virginia Department of Environmental Protection, Division of Air Quality has prepared this NO_x Budget Permit Application for affected sources under 45CSR1, 45CSR26, and/or 40 CFR part 97 (Section 126). Please refer to sections 21 & 22 of 45CSR1, 45CSR26 and/or 40 CFR part 97, as applicable.

This NO_x Budget Permit Application is submitted under: ☒ 45CSR1 ☐ 45CSR26 ☐ Section 126
(Please check all that apply)

This submission is: ☒ New ☐ Revised

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

Plant Name	Company ID Number	ORIS/Facility Code
PPG Industries Inc. Natrium Plant	00002	50491

STEP 2
Enter the unit ID# and description for each NO_x Budget Unit.

Unit ID#	Description
002	Boiler #3
001	Boiler #4
003	Boiler #5

STEP 3
Read the standard requirements and the certification, enter the name of the NO_x authorized account representative, and sign and date.

Standard Requirements

(a) Permit Requirements.

(1) The NO_x authorized account representative of each NO_x Budget source required to have a federally enforceable permit and each NO_x Budget unit required to have a federally enforceable permit at the source shall:

(i) Submit to the Director of the Division of Air Quality (Director) a complete NO_x Budget permit application under 45CSR1-22, 45CSR26-22, and/or § 97.22 in accordance with a deadline specified by the Director under 45CSR1-21.2 and 21.3, 45CSR26-21.2 and 21.3, and/or § 97.21(b) and (c) as applicable;

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

(2) The owners and operators of each NO_x Budget source required to have a federally enforceable permit and each NO_x Budget unit required to have a federally enforceable permit at the source shall have a NO_x Budget permit issued by the Division of Air Quality and operate the unit in compliance with such NO_x Budget permit.

PPG Industries, Inc. - Natrium Plant
Plant Name (from Step 1)

(b) Monitoring Requirements.
(1) The owners and operators and, to the extent applicable, the NO_x authorized account representative of each NO_x Budget source and each NO_x Budget unit at the source shall comply with the monitoring requirements of sections 70 through 76 of 45CSR1 or 45CSR26; and/or subpart H of 40 CFR part 97, as applicable.
(2) The emissions measurements recorded and reported in accordance with sections 70 through 76 of 45CSR1 or 45CSR26, and/or subpart H of 40 CFR part 97 shall be used to determine compliance by the unit with the NO_x Budget emissions limitation under paragraph (c).

(c) Nitrogen Oxides Requirements.
(1) The owners and operators of each NO_x Budget source and each NO_x Budget unit at the source shall hold NO_x allowances available for compliance deductions under subsections 45CSR1-54.1, 54.2, 54.5, or 54.6; 45CSR26-54.1, 54.2, 54.5, or 54.6; and/or § 97.54(a), (b), (e), or (f), as applicable, as of the NO_x allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total NO_x emissions for the ozone season from the unit, as determined in accordance with sections 70 through 76 of 45CSR1 or 45CSR26 and/or subpart H of 40 CFR part 97, as applicable, plus any amount necessary to account for actual heat input under subsection 42.5 of 45CSR1 or 45CSR26, and/or § 97.42(e) for the ozone season period or to account for excess emissions for a prior ozone season under subsection 54.4 of 45CSR1 or 45CSR26, and/or § 97.54(d), or to account for withdrawal from the NO_x Budget Trading Program, or a change in regulatory status of a NO_x Budget opt-in unit under sections 86 or 87 of 45CSR1, and/or § 97.86 or § 97.87, as applicable.
(2) Each ton of nitrogen oxides emitted in excess of the NO_x Budget emissions limitation shall constitute a separate violation of 45CSR1 or 45CSR26, §§22-5-1 et seq., and/or 40 CFR part 97, and the Clean Air Act.
(3) A NO_x Budget unit shall be subject to the requirements under paragraph (c)(1) starting on the later of: May 31, 2004 for NO_x Budget units under 45CSR1, 45CSR26 and/or 40 CFR part 97; or the date on which the unit commences operation.
(4) NO_x allowances shall be held in, deducted from, or transferred among NO_x Allowance Tracking System accounts in accordance with sections 40 through 43, 50 through 57, 60 through 62, and 70 through 76 of 45CSR1 or 45CSR26; sections 80 through 88 of 45CSR1, and/or subparts E, F, G, and I of 40 CFR part 97, as applicable.
(5) A NO_x allowance shall not be deducted, in order to comply with the requirements under paragraph (c)(1), for an ozone season in a year prior to the year for which the NO_x allowance was allocated.
(6) A NO_x allowance allocated by the Director or EPA Administrator under the NO_x Budget Trading Program is a limited authorization to emit one ton of nitrogen oxides in accordance with the NO_x Budget Trading Program. No provision of the NO_x Budget Trading Program, the NO_x Budget permit application, the NO_x Budget permit, or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26, and/or § 97.4(b) or § 97.5, as applicable, and no provision of law shall be construed to limit the authority of the Division of Environmental Protection or the United States to terminate or limit such authorization.
(7) A NO_x allowance allocated by the Director or EPA Administrator under the NO_x Budget Trading Program does not constitute a property right.
(8) Upon recordation by the EPA Administrator, every allocation, transfer, or deduction of a NO_x allowance to or from a NO_x Budget unit's compliance account or the overdraft account of the source where the unit is located is incorporated automatically in any NO_x Budget permit of the NO_x Budget unit.

(d) Excess Emissions Requirements.
(1) The owners and operators of a NO_x Budget unit that has excess emissions in any ozone season shall:
(i) Surrender the NO_x allowances required for deduction under subdivision 54.4.a of 45CSR1 or 45CSR26, and/or § 97.54(d)(1) as applicable; and
(ii) Pay any fine, penalty, or assessment or comply with any other remedy imposed under subdivision 54.4.c of 45CSR1 or 45CSR26, and/or § 97.54(d)(3).

(e) Recordkeeping and Reporting Requirements.
(1) Unless otherwise provided, the owners and operators of the NO_x Budget source and each NO_x Budget unit 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 prior to the end of 5 years, in writing by the Director or the EPA Administrator.
(i) The account certificate of representation under 45CSR1-13 or 45CSR26-13 and/or § 97.13, as applicable, for the NO_x authorized account representative for the source and each NO_x Budget unit at the source and all documents that demonstrate the truth of the statements in the account 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 account certificate of representation under 45CSR1-13 or 45CSR26-13 and/or § 97.13 (as applicable) changing the NO_x authorized account representative.
(ii) All emissions monitoring information, in accordance with sections 70 through 76 of 45CSR1 or 45CSR26; and/or subpart H of 40 CFR part 97 (as applicable); provided that to the extent that sections 70 through 76 of 45CSR1 or 45CSR26; and/or subpart H of 40 CFR part 97 (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 NO_x Budget Trading Program.
(iv) Copies of all documents used to complete a NO_x Budget permit application and any other submission under the NO_x Budget Trading Program or to demonstrate compliance with the requirements of the NO_x Budget Trading Program.
(2) The NO_x authorized account representative of a NO_x Budget source and each NO_x Budget unit at the source shall submit the reports and compliance certifications required under the NO_x Budget Trading Program, including those under sections 30 and 70 through 76 of 45CSR1 or 45CSR26; sections 80 through 88 of 45CSR1, and/or subparts D, H, or I of 40 CFR part 97, as applicable.

PPG Industries, Inc. - Natrium Plant
Plant Name (from Step 1)

(f) Liability.
(1) Any person who knowingly violates any requirement or prohibition of the NO_x Budget Trading Program, a NO_x Budget permit, or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26; and/or § 97.4(b) or § 97.5 shall be subject to enforcement pursuant to W. Va. Code §§22-5-1 et seq. or the Clean Air Act.
(2) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_x Budget Trading Program shall be subject to criminal enforcement pursuant to §§22-5-1 et seq. or the Clean Air Act..
(3) No permit revision shall excuse any violation of the requirements of the NO_x Budget Trading Program that occurs prior to the date that the revision takes effect.
(4) Each NO_x Budget source and each NO_x Budget unit shall meet the requirements of the NO_x Budget Trading Program.
(5) Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget source or the NO_x authorized account representative of a NO_x Budget source shall also apply to the owners and operators of such source and of the NO_x Budget units at the source.
(6) Any provision of the NO_x Budget Trading Program that applies to a NO_x Budget unit or the NO_x authorized account representative of a NO_x budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under sections 70 through 76 of 45CSR1 or 45CSR26, and/or subpart H of 40 CFR part 97, as applicable, the owners and operators and the NO_x authorized account representative of one NO_x Budget unit shall not be liable for any violation by any other NO_x Budget unit of which they are not owners or operators or the NO_x authorized account representative and that is located at a source of which they are not owners or operators or the NO_x authorized account representative.

(g) Effect on Other Authorities.
No provision of the NO_x Budget Trading Program, a NO_x Budget permit application, a NO_x Budget permit, or an exemption under subsection 4.2 or section 5 of 45CSR1 or 45CSR26; and/or § 97.4(b) or § 97.5, shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_x authorized account representative of a NO_x Budget source or NO_x Budget unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

Certification

I am authorized to make this submission on behalf of the owners and operators of the NO_x Budget sources or NO_x Budget 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.

Name	Milton R. Neal	
Signature	Milton R. Neal	Date 11/26/02

STEP 4 (For sources with opt-in units only).

For each unit listed under Step 2 that is an opt-in unit, re-enter the unit ID#, and indicate if this is an initial permit application for that unit by checking the box.

Unit ID#	Check box if initial permit application
002	X

Step 5 (For sources with opt-in units only).

Read the certification, enter the name of the NO_x authorized account representative, sign and date.

I certify that each unit for which this permit application is submitted under 45CSR1-80 and/or subpart I of 40 CFR part 97, as applicable, is not a NO_x Budget unit under 45CSR1-4.1 and/or 40 CFR 97.4(a) and is not covered by an exemption under subsection 4.2 or section 5 of 45CSR1, and/or 40 CFR part 97.4(b) or 97.5 that is in effect.

Name: Milton R. Neal

Signature: Milton R. Neal Date: 11/24/02

STEP 6 (For sources submitting an initial NO_x Budget opt-in permit application).

Read the certification, enter the name of the NO_x authorized account representative, sign and date.

I certify that each unit for which this permit application is submitted under 45CSR1-80 and/or subpart I of 40 CFR part 97, as applicable, is operating, as that term is defined under 45CSR1-2 and/or 40 CFR 97.2.

Name: Milton R. Neal

Signature: Milton R. Neal Date: 11/24/02

APPENDIX B

45CSR2 & 45CSR10 Monitoring and Recordkeeping Plan

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

PPG Industries, Inc.

Facility Information:

Facility Name: PPG Industries, Inc. – Natrium Plant

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

Facility Environmental Contact: J. T. Horan

A. Facility Description:

PPG Industries, Inc. – 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 can not 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 can not 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.

∗ 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, PPG Industries, Inc. 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.

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 can not 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

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∗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, PPG Industries, Inc. 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

PPG Industries, Inc**.** 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. PPG Industries, Inc. 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, PPG Industries, Inc. – 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:

PPG Industries, Inc. – 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 OAQ.

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 OAQ. PPG Industries, Inc. is proposing that the requirements under this initial monitoring plan be implemented during a period of 3 months after approval by OAQ 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 OAQ work with PPG Industries, Inc. to reach a workable implementation date. Likewise, PPG Industries, Inc. is committed to working with the OAQ on a successful implementation.

APPENDIX C

Example Data Forms

Example Data Form I
Record of Total Tank Throughput
(7.0. MCB Dept.; R13-2046)

Tank ID: _____ Allowable Throughput: _____

Month, Year	Monthly Throughput (gallons)	12-Month Cumulative Total (gallons)	Initials[3]

[1] The CERTIFICATION OF DATA ACCURACY statement must be copied onto the reverse side of this sheet and must be completed within fifteen (15) days of the end of the reporting period.

[2] This record shall be maintained onsite for a period of five (5) years from the date of certification. It shall be made available, upon request, to the Director or his duly authorized representative.

[3] After entering the required information, each entry shall be initialed by a person designated by the Responsible Official. Electronic versions of this document must include some means of identification of the person making the data entry.

Example Data Form II
Record of Total Load-Out Throughput
(7.0 MCB Dept.; R13-2046)

Load-Out ID: _____ Allowable Throughput: _____

Month, Year	Monthly Throughput (gallons)	12-Month Cumulative Total (gallons)	Initials[3]

[1] The CERTIFICATION OF DATA ACCURACY statement must be copied onto the reverse side of this sheet and must be completed within fifteen (15) days of the end of the reporting period.

[2] This record shall be maintained onsite for a period of five (5) years from the date of certification. It shall be made available, upon request, to the Director or his duly authorized representative.

[3] After entering the required information, each entry shall be initialed by a person designated by the Responsible Official. Electronic versions of this document must include some means of identification of the person making the data entry.

Example Data Form III
Record of Total Load-Out Emissions
(7.0 MCB Dept.; R13-2046)

Month, Year: _____

Product to be Loaded	Emission Unit ID	Emission Factor (Pounds/ 10^3 Gallons)	Monthly Throughput (Gallons)	Monthly Emissions (pounds)	12-Month Cumulative Total (pounds)
Chlorobenzene	Z053	0.33778			
	Z054	0.81630			
	Z056	0.81630			
	Z057	0.81630			
HCl	Z053	~~0.00766~~ 0.00784			
	Z054	~~0.00861~~ 0.00848			
m-DCB (Crystal o-DCB)	Z053	0.17391			
	Z054	0.31270			
	Z056	0.31270			
o-DCB	Z053	0.06077			
	Z054	0.25685			
	Z056	0.18352			
	Z057	0.11018			
p-DCB	Z053	0.72240			
	Z054	1.98667			
	Z056	1.98667			
TCB	Z053	0.04116			
	Z054	0.09948			
	Z056	0.09948			

[1] The CERTIFICATION OF DATA ACCURACY statement must be copied onto the reverse side of this sheet and must be completed within fifteen (15) days of the end of the reporting period.

[2] This record shall be maintained onsite for a period of five (5) years from the date of certification. It shall be made available, upon request, to the Director or his duly authorized representative.

[3] After entering the required information, each entry shall be initialed by a person designated by the Responsible Official. Electronic versions of this document must include some means of identification of the person making the data entry.

Example Data Form IV
CERTIFICATION OF DATA ACCURACY
(7.0 MCB; R13-2046~~A~~)

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 V

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 D

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