West Virginia Department of Environmental Protection
Division of Air Quality

Joe Manchin, III
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Bayer MaterialScience LLC
New Martinsville Facility
R30-05100009-2008

John A. Benedict
Director

Issued: May 8, 2008 • Effective: May 22, 2008

Permit Number: **R30-05100009-2008**
Permittee: Bayer MaterialScience LLC
Facility Name: New Martinsville Facility
Permittee Mailing Address: P.O. Box 500
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:	Natrium, Marshall County, West Virginia
Facility Mailing Address:	P.O. Box 500 New Martinsville, WV 26155
Telephone Number:	304-455-4400
Type of Business Entity:	LLC
Facility Description:	The New Martinsville facility is an integrated chemical plant whose primary purpose is to produce isocyantes, polyesters, polyethers, and acrylics. The majority of the production units in this plant are involved with the production of polyurethane products (isocyantes and polyols).
SIC Codes:	2869; 2821; 2819
UTM Coordinates:	514.50 km Easting • 4397.50 km Northing • Zone 17

Permit Writer: Mike Egnor

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

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

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

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
~~Boiler House #1~~					
~~9300-001~~	~~002~~	~~Boiler #7 - Produces 670 pound steam~~	~~1969~~	~~154.5 MM BTU/hr~~	~~N/A~~
~~9300-008~~	~~002~~	~~Boiler #8 - Produces 670 pound steam~~	~~1970~~	~~142.1 MM BTU/hr~~	~~N/A~~
Boiler House #2					
9300-648	022	Boiler #9 - Produces 670 pound steam	1971	246.2 MM BTU/hr	N/A
9300-501	022	Boiler #10 - Produces 670 pound steam	1971	171.0 MM BTU/hr	N/A
9300-720	022	Boiler #11- Produces 670 pound steam	2007	98.0 MM BTU/hr	N/A
ECD					
033-121	011	TDI Residue Silo	1986	270 tons	033-021
033-172	011	Bed Sand Silo	1993	35 tons	N/A
033-220	011	Sulfur Silo	2002	5,000 lbs	033-221
033-205	011	PAC silo	2000	80,000 lb	033-207
033-162	011	Aqueous burning tank	1991	23,000 gal	033-162c 9100-525
033-197	011	Wastewater Storage Tank	1998	18,500 gal	033-197c
033-198	011	Wastewater Storage Tank	1998	18,500 gal	033-198c
033-019	011	TDI Residue Feed Silo	1986	1,900 ft^3	PB15 033-021
033-001	011	Sludge Tank	1986	2,000 gal	9100-525
033-037	011	Diesel Fuel Tank	1986	1,000 gal	N/A
9100-021	011	Neutralization Basin	1973	100,000 gal	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
9100-703 9100-705	011	Neutralization Tanks (2)	1996	21,225 gal ea.	N/A
9100-583	011	Primary Clarifier Suck Tank	1973	22,000 gal	N/A
9100-030	011	Primary Clarifier	1973	1 MM gal	N/A
9100-584 9100-585	011	Equalization Tanks (2)	1987	2.5 MM gal ea.	N/A
9100-063.1 9100-063.2	011	Biox Tanks (2)	1973	1 MM gal ea.	N/A
9100-509	011	Secondary Clarifier Feed Tank	1973	4,700 gal	N/A
9100-067	011	Secondary Clarifier	1973	1 MM gal	N/A
9100-074	011	Carbon Treat Feed Tank	1973	4,700 gal	N/A
9100-762	011	Effluent Diffuser Head Tank	1997	85,000 gal	N/A
9100-092.1 9100-092.2 9100-523	011	Carbon Towers (3)	1973 1973 1988	11,450 ft^3 ea.	N/A
9100-734	011	Emergency Spill Tank	1995	100,000 gal	N/A
9100-630	011	RCRA Sump Pit Tank	1987	2,233 gal	N/A
9100-732 9100-733	011	Poly E Tank (2)	1985	2,100 gal ea.	N/A
9100-002	011	Caustic Tank	1973	80,000 gal	N/A
9100-042	011	Phosphoric Tank	1983	3,000 gal	N/A
033-040	011	Fluidized Bed Incinerator	1986	43 MM BTU/hr	033-070 033-083
9100-772	011	FBI Waste Tank	2007		N/A
HCL and SL					
5300-648	015	HCL Tank 1501	2000	1 MM gal	5300-052
5300-021	015	HCL Tank 1502	1966	2 MM gal	5300-624
5300-545	015	HCL Tank 1503	1980	1 MM gal	5300-701
15NN	15NN	Loading Rack	1980	NA	Scrubber 9950-515

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
15OO	15OO	Loading Rack	1980	NA	Scrubber 9950-515
Polyols					
011-001.1	No Vent Pressurized	PO Tank (STV32A) – pressurized no vent	1970	27,000 gallons	
011-001.2	No Vent Pressurized	PO Tank (STV33A) – pressurized no vent	1970	27,000 gallons	
011-005	No Vent Pressurized	PO Tank (STV34) – pressurized no vent	1970	27,000 gallons	
011-010	EP10	EDA Tank (STV44)	1969	6,000 gallons	
011-015	EP6	RM Tank (STV40)	1969	16,560 gallons	
011-019	EP13	Sulfuric Tank (STV47)	2000	6,000 gallons	
011-137	EP9	RM Tank STV45	1974	7,000 gallons	
011-140	No Vent Pressurized	Freon Tank (STV37) pressurized no vent	1973	6,600 gallons	
011-160.1	EP11	RM Tank STV45	1972	20,000 gallons	
011-160.2	EP12	RM Tank STV46	1972	20,000 gallons	
011-163.2	EP54	RM Tank (PVP54) terate	1972	12,000 gallons	
011-513	EP14	RM Tank (STV48) KOH	1975	18,500 gallons	
011-540	EP7	RM Tank (STV41) Fyrol	1979	10,000 gallons	
011-543	EP4	RM Tank (STV38) Niax	1979	10,000 gallons	
011-569	EP5	RM Tank (STV39) PG	1975	10,000 gallons	
011-735	EP8	RM Tank (STV42) o-TDA	1987	12,800 gallons	
011-857	EP41	RM Tank (STV38) TXIB	1994	10,000 gallons	
011-605	No Vent Pressurized	Tank	1969	15,000 gallons	
011-798	No Vent Pressurized	Tank	1990	6,500 gallons	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
011-102.1	STV76	Tank	1997	6,000 gallons	
011-789	EP55	Sugar Hopper	1991	185 ft^3	
011-790	EP56	Sugar Hopper	1991	185 ft^3	
011-1176	EP59	Carbon Black Paste Tank	2000	6,000 gal	
011-081	EP60	Cold Glycol Tank	1969	1,500 gal	
011-012	EP61	Hot Glycol Tank	1969	500 gal	
011-087.1	EP15	FG Tank (STV1)	1969	20,000 gal	
011-087.2	EP16	FG Tank (STV2)	1969	20,000 gal	
011-087.3	EP17	FG Tank (STV3)	1969	20,000 gal	
011-087.4	EP18	FG Tank (STV4)	1969	20,000 gal	
011-087.5	EP19	FG Tank (STV5)	1969	20,000 gal	
011-087.6	EP20	FG Tank (STV6)	1969	20,000 gal	
011-087.7	EP21	FG Tank (STV7)	1969	20,000 gal	
011-087.8	EP22	FG Tank (STV8)	1969	20,000 gal	
011-087.9	EP23	FG Tank (STV9)	1969	20,000 gal	
011-087.10	EP24	FG Tank (STV10)	1969	20,000 gal	
011-087.11	EP25	FG Tank (STV11)	1969	20,000 gal	
011-087.12	EP26	FG Tank (STV12)	1969	20,000 gal	
011-087.13	EP27	FG Tank (STV13)	1969	20,000 gal	
011-087.14	EP28	FG Tank (STV14)	1969	20,000 gal	
011-087.15	EP29	FG Tank (STV15)	1969	20,000 gal	
011-086.1	EP30	FG Tank (STV16)	1973	80,000 gal	
011-086.2	EP31	FG Tank (STV17)	1969	80,000 gal	
011-086.3	EP32	FG Tank (STV18)	1969	80,000 gal	
011-086.4	EP33	FG Tank (STV19)	1973	80,000 gal	
011-086.5	EP34	FG Tank (STV20)	1973	80,000 gal	
011-086.6	EP35	FG Tank (STV21)	1973	80,000 gal	
011-086.7	EP36	FG Tank (STV22)	1973	80,000 gal	
011-170.1	EP37	FG Tank (STV23)	1973	300,000 gal	
011-593	EP38	FG Tank (STV24)	1982	20,000 gal	
011-630	EP39	FG Tank (STV25)	1982	160,000 gal	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
011-742	EP40	FG Tank (STV26)	1988	25,000 gal	
011-163.1	EP47	Filter Feed Tank	1969	12,000 gal	
011-056.1A/B	EP48	Evaporative Feed Tank	1969	10,000 gal	
011-060.1A/B	EP49	Product Hold Tank	1969	10,000 gal	
011-056.2A	EP50	Product Hold Tank	1969	5,000 gal	
011-056.2B	EP51	Product Hold Tank	1969	5,000 gal	
011-060.2A	EP52	Product Hold Tank	1969	5,000 gal	
011-060.2B	EP53	Product Hold Tank	1969	5,000 gal	
011-845	EP57	Wastewater Tank	1996	6,565 gal	
011-850	EP58	Wastewater Tank	1996	6,565 gal	
011-027.1	EP1	#1 Polyol Reactor (PVP57)	1986	4,250 gal	
011-027.2	EP1	#2 Polyol Reactor (PVP57)	1986	4,250 gal	
011-027.3	EP1	#3 Polyol Reactor (PVP57)	1986	4,250 gal	
011-027.4	EP1	#4 Polyol Reactor (PVP57)	1986	4,250 gal	
011-027.5	EP1	#5 Polyol Reactor (PVP57)	1986	4,250 gal	
011-027.6	EP1	#6 Polyol Reactor (PVP57)	1986	4,250 gal	
011-027.9	EP1	#9 Polyol Reactor (PVP57)	1986	4,250 gal	
011-027.10	EP1	#10 Polyol Reactor (PVP57)	1986	4,250 gal	
011-034.1	EP1	#1 Neutralizer	1969	4,300 gal	
011-034.2	EP1	#2 Neutralizer	1969	4,300 gal	
011-034.3	EP1	#3 Neutralizer	1969	4,300 gal	
011-034.4	EP1	#4 Neutralizer	1969	4,300 gal	
011-034.5	EP1	#5 Neutralizer	1969	4,300 gal	
011-034.6	EP1	#6 Neutralizer	1997	4,300 gal	
011-034.7	EP1	#7 Neutralizer	1997	4,300 gal	
011-034.8	EP1	#8 Neutralizer	1997	4,300 gal	
011-034.9	EP1	#9 Neutralizer	1997	4,300 gal	
011-609.1	EP3B	Pre-mix Tank (PVP63A/63B)	1983	1,000 gal	
011-609.2	EP3C	Pre-mix Tank (PVP65A/65B)	1983	1,000 gal	
011-609.3	EP3D	Pre-mix Tank (PVP61A/61B)	1983	1,000 gal	
011-741	EP3A	Pre-mix Tank (PVP59A/59B)	1988	2,000 gal	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
011-610	EP3H	East Blend Tank (PVP60A/60B)	1982	5,850 gal	
011-740	EP3E	Far East Blend Tank (PVP58A/58B)	1988	5,850 gal	
011-115.1	EP3F	Middle Blend Tank (PVP62A/62B)	2001	5,850 gal	
011-115.2	EP3G	West Blend Tank (PVP64A/64B)	1970	5,850 gal	
011-662	EP42	SW Blend Storage (STV 27)	1982	25,000 gal	
011-611.1	EP43	SE Blend Storage (STV 28)	1982	25,000 gal	
011-570.1	EP44	E Blend Storage (STV 29)	1975	25,000 gal	
011-570.2	EP45	M Blend Storage (STV 30)	1975	25,000 gal	
011-570.3	EP46	W Blend Storage (STV 31)	1975	25,000 gal	
011-719.1	EP66A	Railcar loading (001-001)	1970's	N/A	
011-719.2	EP66B	Railcar loading (001-002)	1970's	N/A	
011-719.3	EP66C	Railcar loading (001-003)	1970's	N/A	
011-719.4	EP66D	Railcar loading (001-004)	1970's	N/A	
011-719.5	EP66F	Railcar loading (001-005)	1970's	N/A	
011-719.1A	EP67A	Trailer loading (002-001)	1970's	N/A	
011-719.1B	EP67B	Trailer loading (002-002)	1970's	N/A	
011-719.1C	EP67C	Trailer loading (002-003)	1970's	N/A	
011-719.1D	EP67D	Trailer loading (002-004)	1970's	N/A	
011-719.2A	EP68A	Trailer loading (003-001)	1970's	N/A	
011-719.2B	EP68B	Trailer loading (003-002)	1970's	N/A	
011-719.3A	EP69A	Trailer loading (004-001)	1970's	N/A	
011-579.3B	EP69B	Trailer loading (004-002)	1970's	N/A	
011-130	EP70	Drum/Tote Filling (005)	1970's	N/A	
011-621.1	EP-71	Trailer Loading (006)	1970's	N/A	
STV32	EP-72	FG Storage Tank (STV32)	2007	23,000 gal	
Texin					
PV11	022-570	ZSK-83 Extruder	1988	10 MMlb/yr	
PV11	022-814	ZSK-83 Extruder	1995	10 MMlb/yr	
PV11	022-890	ZSK-120 Extruder	1996	20 MMlb/yr	
VC01/PC01	022-196.1	#1 Silo	1969	750 ft^3	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
VC01/PC01	022-196.2	#2 Silo	1969	750 ft^3	
VC01/PC01	022-196.3	#3 Silo	1969	750 ft^3	
VC01/PC01	022-196.4	#4 Silo	1969	750 ft^3	
002-597/PC01	022-448	#5 Silo	1995	750 ft^3	
002-597/PC01	022-449	#6 Silo	1995	750 ft^3	
002-597/PC01	022-922	#7 Silo	1996	1500 ft^3	
002-597/PC01	022-923	#8 Silo	1996	1500 ft^3	
VC01/PC01	022-609	Pelletizer	1990	4000 lbs / hr	
VC01/PC01	022-710	Pelletizer	1994	4000 lbs / hr	
VC01/PC01	022-821	Pelletizer	1994	4000 lbs / hr	
VC01/PC01	022-822	Pelletizer	1994	4000 lbs / hr	
VC01/PC01	022-897	Pelletizer	1996	4000 lbs / hr	
023-101	023-101	Polyol Stg Tank	1969	20000 gal	
023-104	023-104	Polyol Stg Tank	1969	20000 gal	
023-502	023-502	Polyol Stg Tank	1994	20000 gal	
023-508	023-508	Polyol Stg Tank	1994	20000 gal	
023-513	023-513	Polyol Stg Tank	2001	5000 gal	
023-113	023-113	Solvent Stg Tank	1969	5000 gal	
023-110	023-110	XE Stg Tank	1969	5000 gal	
022-118	022-118	Polyol Mix Tank	1969	1500 gal	
022-119	022-119	Polyol Mix Tank	1969	1500 gal	
022-122	022-122	Polyol Mix Tank	1969	1500 gal	
022-123	022-123	Polyol Mix Tank	1969	1500 gal	
022-116	022-116	XB Day Tank	1969	300 gal	
022-595	022-595	MDI Day Tank	1988	1050 gal	
022-441	022-441	DES-W Day Tank	1995	1050 gal	
022-117	022-117	XE Day Tank	1969	300 gal	

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
022-841	022-841	#2 Resin Run Tank	1969	60 gal	
022-875	022-875	Polyol Hold Tank	1995	2000 gal	
022-878	022-878	Polyol Hold Tank	1996	2000 gal	
022-732	022-732	#1 Resin Heater	1988	141 M BTU/hr	
022-813	022-813	#2 Resin Heater	1995	141 M BTU/hr	
022-889	022-889	#3 Resin Heater	1996	198 M BTU/hr	
022-841b	022-841b	#1 Resin Run Tank	1969	60 gal	
022-1077	022-1077	Hold Tank	2002	2000 gal	
022-946/1103	022-946/1103	Vacuum Pumps	1996	23 CFM @ 15" Vacuum	
022-526/957	022-526/957	Barringer ovens (2)	1969 / 1996	900 ^{o}F	
022-1023	022-1023	Gala Dryer	2003		
TX4-1	022-1080	Additive Batch Tank	2003	250 gal	
TX4-1	022-1082/1083	Mixer/Product Cure Oven	2003		
TX4-2	022-1076	Hold Tank	2003	2,000 gal	
TX4-3	022-0118	Mix Tank	2003	1,500 gal	
TX4-4	022-0831	Cyclone	2003	6.41 ft^3	022-970
022-844a	022-844a	MDI Run Tank	1969	20 gal	
022-844b	022-844b	XE Run Tank	1969	20 gal	
MPP					
PCV001.2	5700-011	Intermediate Hold Tank	1981	5,600 gal	Car-1
PCV001.2	5700-001.1	#1 Crystallizer	1981	5,313 gal	Car-1
PCV001.2	5700-001.2	#2 Crystallizer	1981	5,313 gal	Car-1
PCV001.2	5700-008.1	#1 TD Hold Tank	1981	3,600 gal	Car-1
PCV001.2	5700-008.2	#2 TD Hold Tank	1981	3,600 gal	Car-1
PCV001.2	5700-009.1	#1 TDS Hold Tank	1981	3,600 gal	Car-1
PCV001.2	5700-009.2	#2 TDS Hold Tank	1981	3,600 gal	Car-1
ATP					

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
SC15	4500-001	Reactor	1989	5,000 gal	SC15
SC15	SC15	Weigh Tote	1989	1,000 gal	SC15
SC15	SC15	Drumming	1989		SC15
CV34	5000-573	Diethyl Maleate Storage	1962	20,000 gal	Car-3
CV37	CV37	Trailer Loading (inactive)	1989		Car-3
CV36	2600-508	PACM Storage	1989	25,000 gal	
SPU					
026-092	92	Methyl-P Storage Pot	1990	50 Gal	Carbon Drum car-092
026-662	662	Benzoyl Chloride Pot	1989	30 Gal	Carbon Drum car-662
026-762	762	Masterbatch Mix Tank	1992	100 Gal	Carbon Drum car-762
026-663	663	Isocyanate Weigh Tank	1989	2,000 Gal	Carbon Drum car-663
026-644	644	Polyester Weigh Tank	1989	2,000 Gal	None
026-642	642	Polyether Weigh Tank	1989	2,000 Gal	None
026-524	524	#1 Weigh Tank	1981	2,000 Gal	None
026-552	552	#2 Weigh Tank	1981	2,000 Gal	None
026-653	653	Vacuum Pump	1989	NA	Carbon Drum car-653
026-233	233	Vacuum Pump	1974	NA	Carbon Drum car-233
026-654	654	Vacuum Pump	1989	NA	Carbon Drum car-654
026-794	794	Pig Launcher	1994	NA	Carbon Drum car-794
026-522	PV12	"R" Reactor Vent	1981	7,500 Gal	Carbon Drum car-522
026-230	PV10	"M" Reactor Vent	1974	5,000 Gal	Carbon Drum car-230r
026-645	PV13	"X" Reactor Vent	1989	9,000 Gal	Carbon Drum car-645

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
026-756	PV09	"M" Drumming Vent	1990	NA	Carbon Drum car-756
026-752	PV14	"X" Drumming Vent	1990	NA	Carbon Drum car-752
032-001	PV86	TDI Run Tank	1970	1,850 Gal	Carbon Drum car-4
032-006	006	Polyol Run Tank	1970	1,850 Gal	None
032-002	002	#1 Post Reactor	1970	1,850 Gal	None
032-003	045.1	#2 Post Reactor	1970	1,850 Gal	None
032-044	045.1	Thin Film Evaporator	1979	300 Gal	None
032-005	005	#2 Intermediate Storage	1970	1,850 Gal	None
032-030	045.1	Condenser	1971	150 Gal	None
032-031	045.1	Condenser	1971	150 Gal	None
032-539	045.1	PHD Vacuum Pump	2001	N/A	None
026-008	8	Tank Truck Loading	1984	N/A	Carbon Drum car-008
026-592.1	592.1	Vacuum Pump	1984	N/A	None
026-592.2	592.2	Vacuum Pump	1984	N/A	None
026-548.1	548.1	Vacuum Pump	1997	N/A	Scrubber 060-064
026-548.2	548.2	Vacuum Pump	1997	N/A	Scrubber 060
026-548.3	548.3	Vacuum Pump	1995	N/A	Scrubber 060
026-078	*	"L" Reactor Reflux Column	1970	660 Gal	(Thru 548.2)
026-550	*	"L" Reactor Partial Condenser	1983	275 Gal	(Thru 548.2)
026-079	*	"L" Reactor Total Condenser	1971	150 Gal	(Thru 548.2)
026-547.2	*	"L" and "N" Vacuum Pump to West Knock-out Pot	1983	290 Gal	(Thru 548.2)
026-541	*	"N" Reactor Reflux Column	1983	690 Gal	(Thru 548.1)
026-543	*	"N" Reactor Partial Condenser	1983	350 Gal	(Thru 548.1)
026-545	*	"N" Reactor Total Condenser	1983	175 Gal	(Thru 548.1)
026-547.1	*	"L" and "N" Vacuum Pump to East Knock-out Pot	1983	290 Gal	(Thru 548.1)
026-807	*	"O" Reactor Reflux Column	1997	690 Gal	(Thru 548.3)
026-809	*	"O" Reactor Partial Condenser	1997	350 Gal	(Thru 548.3)
026-811	*	"O" Reactor Total Condenser	1997	175 Gal	(Thru 548.3)
026-813	*	"O" Reactor Knock-out Condenser	1997	60 Gal	(Thru 548.3)

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
026-814	*	"O" Reactor Knock-out Separator	1997	200 Gal	(Thru 548.3)
026-804	*	"O" Reactor	1997	7,500 Gal	(Thru 548.3)
026-589	PV08	Glycol Weigh Tank	1985	2,000 Gal	None
026-555	PV05	"L" Drumming	1985	NA	Carbon Drum car-555
026-076	PV03	"L" Reactor Vent	1970	5,000 Gal	None
026-533	PV07	"N" Reactor Vent	1983	7,500 Gal	None
026-588	588	Acid Weigh Tank	1985	2,000 Gal	None
SPU (Dispersion)					
060-001	AE9	Aliphatic Isocyanate Weigh Tank	2000	1,000 Gal	Carbon Drum (060-003)
060-004	AE17	Polyether Weigh Tank	2000	1,000 Gal	Scrubber (060-064)
060-008	AE17	Polyester Weigh Tank	2000	2,000 Gal	Scrubber (060-064)
060-009	AE17	Prepolymer Reactor	2000	2,600 Gal	Scrubber (060-064)
060-022	AE17	Distillation Reactor	2000	6,600 Gal	Scrubber (060-064)
060-034	AE17	Formulation Reactor	2000	10,500 Gal	Scrubber (060-064)
060-051	AE17	Acetone Pump Tank	2000	300 Gal	Scrubber (060-064)
060-053	AE17	Chain Extender Tank	2000	500 Gal	Scrubber (060-064)
060-056	AE17	Neutralizer Tank	2000	660 Gal	Scrubber (060-064)
060-066	AE30	Drum Charging Exhaust Blower	2000	NA	None
060-067	AE17	Chain Extender Tk 1500	2000	1,500 Gal	Scrubber (060-064)
060-080A/B	AE17	Acetone Tote & Spare	2000	600 Gal	Scrubber (060-064)
060-090	AE32	Chilled Water Tank	2000	16,000 Gal	None
026-775	AE17	SPU Waste Water Surge Tank	1997	3000 Gal	Scrubber (060-064)
026-776	AE17	Waste Water Pump Tank	1997	300 Gal	Scrubber (060-064)

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
060-019	AE31	Captive Water Tank	2000	500 Gal	None
2000-645	AE10	Acetone Recovery Tank	2000	25,000 Gal	Scrubber (2000-629)
2000-638	AE10	Acetone Column Vent Condenser	2000	50 Gal	Scrubber (2000-629)
2000-644	AE10	Acetone Storage Tank	2000	25,000 Gal	Scrubber (2000-629)
060-027	AE33	DM Hold Tank	2000	4500 Gal	None
060-018	AE27	Glycol Cleaning Tk	2000	5000 Gal	None
026	AE15	Tank Truck Loading	2000	NA	None
060-043	AE16	Drummer/Drumming Area	2000	NA	None
026-140	AE19	TMP Storage Tank (13-14)	1970	25000 Gal	None
020-400	Unnumbered	Desmodur W Storage Tank (13-26)	1981	80000 Gal	Carbon Drum (car-2)
020-641	AE2	13-17 Storage Tank	1970	25000 Gal	None
020-648	AE1	13-15 Storage Tank	1970	25000 Gal	None
089-004	AE21	ButaneDiol Storage Tank	1982	80000 Gal	None
089-039	Indirect	Hydrazine Storage Tank (1206)	1988	27500 Gal	Scrubber (089-041)
2000-540	AE4	Polyester Storage Tank	1955	13000 Gal	None
2000-650	AE28	Polyester Storage Tank	1955	20000 Gal	None
2000-501	AE20	Ethylene Glycol Storage Tank (3-24)	1955	20000 Gal	None
2000-632	AE26	NMP Storage Tank	1955	13000 Gal	None
060-038	AE13	Kathion Hold Tank	2000	185 Gal	None
060-106	AE29	20% Caustic Tank	2001	392 Gal	None
------	AE24	Waste Glycol Trailer	2000	5000 Gal	None
MHD					
301	301	Storage Tank	Approx. 1967	20,000 Gallons	None
302	302	Storage Tank	Approx. 1967	20,000 Gallons	None
303	303	Storage Tank	1963	20,000 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
304	304	Storage Tank	1963	20,000 Gallons	None
305	305	Storage Tank	1961	80,000 Gallons	None
306	306	Storage Tank	Approx. 1967	80,000 Gallons	None
309	309	Storage Tank	Approx. 1967	10,000 Gallons	None
310	310	Storage Tank	Approx. 1967	18,000 Gallons	None
312	312	Storage Tank	Approx. 1967	18,000 Gallons	None
313	313	Storage Tank	Approx. 1967	20,000 Gallons	None
315	315	Storage Tank	1963	20,000 Gallons	None
317	317	Storage Tank	Approx. 1967	12,000 Gallons	None
321	321	Storage Tank	Approx. 1967	12,000 Gallons	None
322	322	Storage Tank	Approx. 1967	12,000 Gallons	None
323	323	Storage Tank	Approx. 1967	12,000 Gallons	None
324	324	Storage Tank	Approx.1967	20,000 Gallons	None
325	325	Storage Tank	Approx. 1967	12,000 Gallons	None
326	326	Storage Tank	Approx. 1967	35,000 Gallons	None
327	327	Storage Tank	Approx. 1967	35,000 Gallons	None
539	539	Storage Tank	Approx. 1967	500,000 Gallons	None
558	CA24	Storage Tank	1991	40,000 Gallons	TCA08 Carbon
559	CA25	Storage Tank	1991	40,000 Gallons	TCA09 Carbon

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1202	1202	Storage Tank	Prior to 1980	25,000 Gallons	None
1203	1203	Storage Tank	1981	300,000 Gallons	None
1204	1204	Storage Tank	Prior to 1980	25,000 Gallons	None
1205	1205	Storage Tank	Prior to 1980	12,500 Gallons	None
1206	1206	Storage Tank	Prior to 1980	28,000 Gallons	None
1207	1207	Storage Tank	Prior to 1980	80,000 Gallons	None
1208	1208	Storage Tank	1982	80,000 Gallons	None
1209	1209	Storage Tank	Prior to 1980	80,000 Gallons	None
1210	1210	Storage Tank	Prior to 1980	20,000 Gallons	None
1211	1211	Storage Tank	Prior to 1980	20,000 Gallons	None
1212	1212	Storage Tank	Prior to 1980	12,000 Gallons	None
1213	1213	Storage Tank	Prior to 1980	12,000 Gallons	None
1214	1214	Storage Tank	Prior to 1980	12,000 Gallons	None
1215	1215	Storage Tank	Prior to 1980	12,000 Gallons	None
1216	1216	Storage Tank	Prior to 1980	12,000 Gallons	None
1301	1301	Storage Tank	1966	300,000 Gallons	None
1302	1302	Storage Tank	1968	300,000 Gallons	None
1303	1303	Storage Tank	1970	300,000 Gallons	None
1304	1304	Storage Tank	1970	300,000 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1305	1305	Storage Tank	1970	300,000 Gallons	None
1306	1306	Storage Tank	1970	80,000 Gallons	Carbon
1307	1307	Storage Tank	1970	80,000 Gallons	None
1308	1308	Storage Tank	1970	80,000 Gallons	None
1309	1309	Storage Tank	1970	80,000 Gallons	None
1310	1310	Storage Tank	1970	80,000 Gallons	None
1311	1311	Storage Tank	Approx. 1969	80,000 Gallons	None
1312	1312	Storage Tank	Approx. 1969	12,000 Gallons	None
1313	1313	Storage Tank	Approx. 1969	25,000 Gallons	None
1314	1314	Storage Tank	Approx. 1969	25,000 Gallons	None
1315	1315	Storage Tank	Approx. 1969	25,000 Gallons	None
1316	1316	Storage Tank	Approx. 1969	25,000 Gallons	None
1317	1317	Storage Tank	Approx. 1969	25,000 Gallons	None
1318	1318	Storage Tank	Approx. 1969	25,000 Gallons	None
1319	1319	Storage Tank	Approx. 1969	25,000 Gallons	None
1320	1320	Storage Tank	Approx. 1969	25,000 Gallons	None
1321	1321	Storage Tank	1970	25,000 Gallons	None
1322	1322	Storage Tank	1970	25,000 Gallons	None
1323	1323	Storage Tank	Approx. 1969	80,000 Gallons	None

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
1324	1324	Storage Tank	Approx. 1969	25,000 Gallons	None
1325	1325	Storage Tank	1978	80,000 Gallons	None
1326	1326	Storage Tank	1961	80,000 Gallons	None
1327	1327	Storage Tank	Approx. 1969	80,000 Gallons	None
030-01	030-01	Storage Tank	Approx. 1965	26,000 Gallons	None
030-02	030-02	Storage Tank	Approx. 1965	26,000 Gallons	None
4500-026	4500-026	Storage Tank	Approx. 1981	20,000 Gallons	None
03P	03P	Loading Rack	1963	NA	Carbon
03Q	03Q	Loading Rack	1961	NA	Carbon
03S	03S	Loading Rack	1970	NA	Carbon
03W	03W	Loading Rack	Prior to 1970	NA	Carbon
03Z	03Z	Loading Rack	1961	NA	Carbon
04A	04A	Loading Rack	Approx. 1967	NA	Carbon
05G	05G	Loading Rack	Approx. 1970	NA	Carbon
05TD	05TD	Loading Rack	1970	NA	Carbon
12B	12B	Loading Rack	1982	NA	None
12C	12C	Loading Rack	Prior to 1970	NA	None
13HH	13HH	Loading Rack	Prior to 1970	NA	None
13II	13II	Loading Rack	1966	NA	None
13KK	13KK	Loading Rack	1970	NA	None
13LL	13LL	Loading Rack	1970	NA	None
~~15NN~~	~~15NN~~	~~Loading Rack~~	~~1980~~	~~NA~~	~~Scrubber 9950-515~~
~~15OO~~	~~15OO~~	~~Loading Rack~~	~~1980~~	~~NA~~	~~Scrubber 9950-515~~
05L	CA26	TD/TDS Loading	1991	NA	Carbon Adsorption

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
bnvcl-1	bnvcl-1	Benzoyl Chloride Injection System	1991	NA	Carbon Adsorption
Control Devices					
ECD					
033-070	011	Electrostatic Precipitator	1986	9,000 lbs/hr	N/A
033-083	011	FBI Two Stage Jet Scrubber	1986	9,000 lbs/hr	N/A
033-021	PB15	TDI residue baghouse	1986	1,525 lbs/hr	N/A
033-207	011	PAC silo baghouse	2000	1,000 scfm 226 ft^2	N/A
033-221	011	Sulfur silo baghouse	2002	3.3scfm 46 ft^2	N/A
033-162c	011	Carbon Drum for aqueous burning tank	1991	55 gal	Scrubber
033-197c	011	Carbon Drum for wastewater tank (197)	1998	55 gal	N/A
033-198c	011	Carbon Drum for wastewater tank (198)	1998	55 gal	N/A
9100-525	011	Lime Silo Scrubber	1980	27 ft^3	N/A
HCL and SL					
5300-052	015	Scrubber 052	2000		
5300-624	015	Scrubber 624	1966		
5300-701	015	Scrubber 701	1980		
9950-515	15NN/15OO	HCL Loading Scrubber	1996	2250 cfm; 19gpm	N/A
Polyols					
011-1159	EP-1	Acid Scrubber	2002	N/A	
Texin					
022-970	TX4-4	Baghouse	1996		
MPP					
Car-1	PCV0001.2	Carbon Drum			

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
ATP					
SC15	SC15	Scrubber ATP	1988		
Car-3	CV34	Carbon Drum			
SPU					
Car-092	092	Carbon Drum	Changed frequently		
Car-662	662	Carbon Drum	Changed frequently		
Car-762	762	Carbon Drum	Changed frequently		
Car-663	663	Carbon Drum	Changed frequently		
Car-653	653	Carbon Drum	Changed frequently		
Car-233	233	Carbon Drum	Changed frequently		
Car-654	654	Carbon Drum	Changed frequently		
Car-794	794	Carbon Drum	Changed frequently		
Car-522	PV12	Carbon Drum	Changed frequently		
Car-230	PV10	Carbon Drum	Changed frequently		
Car-645	PV13	Carbon Drum	Changed frequently		
Car-756	PV09	Carbon Drum	Changed frequently		
Car-752	PV14	Carbon Drum	Changed frequently		
Car-4	PV86	Carbon Drum	Changed frequently		
Car-008	8	Carbon Drum	Changed frequently		
Car-444	PV05	Carbon Drum	Changed frequently		
SPU (Dispersion)					
060-003	AE-9	Carbon Drum	2000		
200-629	AE-10	Acetone Scrubber	2000		
car-2	car-2	Carbon Drum	2000		

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
089-041	1206	Hydrazine Scrubber	1988		
060-064	AE-17	Acetone Scrubber	2000		

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
R13-26	4/3/75
R13-138B	4/3/75
R13-842D	12/20/07
R13-863	7/18/86
R13-1040B	8/28/03
R13-1409B	11/21/06
R13-2443C	1/28/08
R13-2351A	11/15/00
R13-2507	10/29/02
R13-2677B	12/20/07

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

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

2.3. Permit Expiration and Renewal

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

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

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

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

2.4. Permit Actions

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

2.5. Reopening for Cause

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

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

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

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

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

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

2.7. Minor Permit Modifications

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

2.8. Significant Permit Modification

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

2.9. Emissions Trading

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

2.10. Off-Permit Changes

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

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

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

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

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

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

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

[45CSR§30-5.9.]

2.11. Operational Flexibility

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

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

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

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

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

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

2.12. Reasonably Anticipated Operating Scenarios

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

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

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

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

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

2.14. Inspection and Entry

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

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

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

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

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

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

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

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

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

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

2.17. Emergency

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

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

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

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

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

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

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

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

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

2.18. Federally-Enforceable Requirements

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

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

2.19. Duty to Provide Information

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

2.20. Duty to Supplement and Correct Information

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

2.21. Permit Shield

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

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

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

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

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

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

2.23. Severability

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

2.24. Property Rights

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

2.25. Acid Deposition Control

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

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

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

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

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

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person~~, firm, corporation, association or public agency~~ 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~~, suffer,~~ or allow ~~or permit~~ any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. §61.145(b) and ~~45CSR15~~ 45CSR34]

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

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

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

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

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

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

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

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

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

3.1.9. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-26, R13-138B, R13-0842C, R13-0863, R13-2351, R13-2351A, R13-2677A, R13-2677B, and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[Permit No. R13-0842 -(Condition C.3.), Permit No. R13-0863 - (Condition G.2.), Permit No. R13-1587 – (Condition C.3.), Permit No. R13-2351 – (Condition C.3.)]

3.1.10. Facility-wide annual emissions to the atmosphere of Hazardous Air Pollutants (HAP) shall not exceed 9.4 tpy of any single HAP or 24.4 tpy on an aggregated basis of total HAP, and shall be limited to the species listed in Table 3.5.10 found in Condition 3.5.10, except as given in Condition 3.1.11 and 3.1.12. Compliance with the annual emission limits shall be determined using rolling yearly totals. A rolling yearly total shall mean the sum of the emissions at any given time for the previous twelve (12) consecutive months.
[45CSR§30-12.7.]

3.1.11. Unless listed in Table 3.5.10 given in Condition 3.5.10, the use of any Hazardous Air Pollutant (HAP) with emission rates in excess of 50 lbs/yr shall be in accordance with the following:

a. The permittee shall notify the Director in writing of the HAP(s) within thirty (30) days of it's use.

b. The use of the HAP shall be incorporated into the record keeping requirements contained herein.
[45CSR§30-12.7.]

3.1.12. Unless listed in Table 3.5.10 given in Condition 3.5.10, the use of any toxic air pollutant (TAP) as defined by West Virginia Legislative Rule 45CSR27, Section 2.10, with emission rates in excess of 50 lbs/yr, shall be in accordance with the following:

a. The permittee shall notify the Director in writing of the TAP(s) within thirty (30) days of it's use.

b. The use of the TAP shall be incorporated into the record keeping requirements contained herein.

c. The emission rate of the TAP(s) shall not equal or exceed, on a per-TAP basis, the annual limits contained in 45CSR27, Table A. Compliance with the annual emission limits shall be determined using rolling yearly totals.
[45CSR§30-12.7. State-Enforceable Only]

3.2. Monitoring Requirements

3.2.1. To demonstrate compliance with Condition 3.1.10, the facility shall calculate on a monthly and annual basis facility-wide HAP emissions to the atmosphere by calculating each individual HAP and total HAP emissions for each calendar month and a 12-month rolling total.
[45CSR§30-5.1.c.]

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.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. To demonstrate compliance with the facility-wide HAP limits of Condition 3.1.10 and monitoring requirements of Condition 3.2.1, the permittee shall maintain monthly and yearly records of facility-wide HAP emissions to the atmosphere. The facility shall prepare monthly facility-wide calculations of the amount of each individual HAP emitted and the amount of aggregated total HAP's emitted. Yearly HAP calculations shall be based on a 12-month rolling total. The permittee shall record and maintain these monthly calculations and all supporting data utilized to perform these calculations for the most recent five (5) year period, and such records shall be made available to the Director or his/her duly authorized representative upon request at any reasonable time.
[45CSR§30-5.1.c.]

3.5. Reporting Requirements

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

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

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

delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

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

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

If to the US EPA:

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

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

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

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

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

3.5.8. **Deviations.**

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

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

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

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

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

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

3.5.10. If the permittee emits any HAP other than those listed in Table 3.5.10. below, at an estimated potential annual emission rate of 50 pounds per year or greater, the permittee shall provide written notification to the Director of the Division of Air Quality within thirty (30) days of knowledge of such emission. This written notification shall include the facility-wide potential to emit (in lbs/hr and tpy) for each new HAP species as well as the location of emissions.

Table 3.5.10. Current HAP Species Emitted (* indicates < 50 lb/yr)

CAS No.	Chemical Name
71-43-2	Benzene
108-90-7	Chlorobenzene
106-46-7	1,4-Dichlorobenzene *
111-42-2	Diethanolamine *
107-21-1	Ethylene Glycol
75-21-8	Ethylene Oxide
50-00-0	Formaldehyde
822-06-0	Hexamethylene Diisocyanate (HMDI)
110-54-3	Hexane
302-01-2	Hydrazine
7647-01-0	Hydrochloric Acid

101-68-8	4,4-Methylene Diphenyl Diisocyanate (MDI)
85-44-9	Phthalic Anhydride
75-56-9	Propylene Oxide
121-44-8	Triethylamine
108-88-3	Toluene
95-80-7	2,4-Toluenediamine
584-84-9	2,4-Toluene Diisocyanate (TDI)
1330-20-7	Xylene (isomers and mixtures, including m-Xylene, o-Xylene and p-Xylene)
-	Misc. Organic HAPS*
-	Misc. Metallic HAPS *

[45CSR§30-5.1.c.]

3.6. Compliance Plan

N/A

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.

40 C.F.R. §§60.40-60.48 NSPS Subpart D (August 17, 1971)	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After 8/17/71. Boiler #7 started up in 1969, Boiler #8 started up 1970, Boiler #9 and Boiler #10 started up in 1971 but prior to August 17, 1971; Current capacities are all < 250 MM BTU/hr essentially as built; maintenance & capital work on boilers have been routine maintenance, repair & replacement, and not "modifications"
40 C.F.R. §§60.40b-60.49b NSPS Subpart Db (June 19, 1984)	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. Boiler #11 (98 MM Btu/hr) started up in December 2007; The capacity is below 100 MM Btu/hr.
40 C.F.R. §§60.110-113 NSPS Subpart K (June 11, 1973)	Standards of Performance for Storage Vessels for Petroleum Liquids For Which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and prior to May 19, 1978. Petroleum liquid storage vessels have capacities less than 40,000 gallons.
40 C.F.R. §§60.110a-115a NSPS Subpart Ka (May 19, 1978)	Standards of Performance for Storage Vessels for Petroleum Liquids For Which Construction, Reconstruction, or Modification Commenced after May 18, 1978 and prior to July 23, 1984. Petroleum liquid storage vessels have capacities less than 40,000 gallons.

40 C.F.R. §§60.110b-60.117b NSPS Subpart Kb (July 23, 1984)	All tanks were found not to be subject to NSPS Kb since all: 1) Were built before July 23, 1984, and no physical modifications or reconstructions were performed since July 23, 1984 and/or 2) Are of capacity less than 19,813 gallons and/or 3) Are of a capacity greater than 39,890 gallons, and have a maximum true vapor pressure of 0.51 psia or less and/or 4) Are of a capacity between 19,818 gallons and 39,890 gallons and have a maximum true vapor pressure of 2.2 psia or less.
40 C.F.R. §§60.150-60.156 NSPS Subpart O	Standards of Performance for Sewage Treatment Plants. The Permittee does not operate a municipal treatment plant.
40 C.F.R. §§60.610-60.618 NSPS Subpart III (October 21, 1983)	Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Process. This facility does not produce any of the listed chemicals as a product, co-product, by-product, or intermediate.
40 C.F.R. §§60.660-60.668 NSPS Subpart NNN (12/30/83)	Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations. This facility does not produce any of the listed chemicals as a product, co-product, by-product, or intermediate.
40 C.F.R. §§60.700-60.708 NSPS Subpart RRR (6/29/1990)	Standards of Performance for Volatile Organic Compound Emissions form Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes. This facility does not produce any of the listed chemicals as a product, co-product, by-product, or intermediate.
40 C.F.R. §§ 60-480-60.489 NSPS Subpart VV (1/5/1981)	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. This facility does not produce final or intermediate products as defined in §60.489.
40 C.F.R. § 63 (Except for Subpart EEE and Subpart PPP)	National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT). The facility is not subject to the major source requirements of the standard. The facility PTE for an individual HAP is not greater than 9.4 tons and aggregate total of all HAPs is not greater than 24.4 tons.
40 C.F.R. 60, Subpart E – "Standards of Performance for Incinerators."	The Bayer-New Martinsville plant incinerator is covered under the Combustion MACT, which has more stringent requirements
40 C.F.R. 60, Subpart DDD – "Standards of Performance for Volatile Organic Compound (VOC)	Emissions from the Polymer Manufacturing Industry." The Bayer-New Martinsville plant does not manufacture polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate) for which this rule applies.

40 C.F.R. 61, Subpart V – "National Emission Standards for Equipment Leaks (Fugitive Emissions Sources)."	Applies to sources in VHAP service as defined in 40 C.F.R. §61.241. VHAP service involves chemicals that are not used in a manner that qualifies them under the rule in the Bayer-New Martinsville plant.
45CSR17 – "To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter."	Per 45CSR§17-6.1, the Bayer-New Martinsville plant is not subject to 45CSR17 because it is subject to the fugitive particulate matter emission requirements of 45CSR7.
40 C.F.R. 63, Subpart DDDDD – "National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers"	The Permittee was subject to this Subpart during the first initial compliance date. They had four existing large gaseous boilers, and one new large gaseous boiler subject to this Subpart. However, on July 30, 2007, EPA vacated this Subpart. It is the current understanding of the WVDEP Title V Section that case by case MACT guidance from EPA will be forthcoming to address these boilers. As a result of this Permit, the Bayer MaterialScience New Martinsville facility will become a synthetic minor for HAP's. The current understanding is that the applicability date for the case by case MACT may be established after this Permit is issued (which contains conditions to make this facility synthetic minor for HAP's), and therefore the Permittee may potentially be subject to case-by-case MACT review for Boiler #11 (9300-720).

4.0 Source-Specific Requirements [~~Boilerhouse #1: 9300-001, 9300-008~~ Reserved]

4.1. Limitations and Standards

4.1.1. Reserved. ~~The visible emission standards set forth in Condition 4.1.5 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary~~.
~~**[45CSR§2-9.1.]**~~

~~4.1.2. At all times, including periods of start-ups, shutdowns, and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emissions observations, review of operating and maintenance procedures, and inspection of the source.~~
~~**[45CSR§2-9.2.]**~~

~~4.1.3. The Permittee shall burn only natural gas in Boilers Number 7 and Number 8.~~
~~**[Consent Order CO-SIP-2000-02 (Condition IV.3.B.)]**~~

~~4.1.4. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:~~

~~a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:~~

~~1. The excess opacity period does not exceed thirty (30) minutes within any 24-hour period; and~~

~~2. Excess opacity does not exceed 40%.~~

~~b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 45CSR§2-9.3.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:~~

~~1. A detailed explanation of the factors involved or causes of the malfunction;~~

~~2. The date and time of duration (with starting and ending times) of the period of excess emissions;~~

~~3. An estimate of the mass of excess emissions discharged during the malfunction period;~~

~~4. The maximum opacity measured or observed during the malfunction;~~

~~5. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and~~

~~6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.~~
~~**[45CSR§2-9.3.]**~~

~~4.1.5. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.~~
~~**[45CSR§2-3.1.]**~~

~~4.1.6. No person shall cause, suffer, allow or permit the discharge of particulate matter into the open air from all fuel burning units located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:~~

~~Boiler~~	~~Heat Input (MMBTU)~~	~~PM Limit (lbs/hr)~~
~~#7~~	~~154.5~~	~~13.90~~
~~#8~~	~~154.21~~	~~13.88~~

~~**[45CSR§2-4.1.b.]**~~

~~4.1.7. No person shall cause, suffer, allow or permit the discharge of sulfur dioxide into the open air from all stacks located at one plant, measured in terms of pounds per hour in excess of the amount determined as follows:~~

~~Boiler~~	~~Heat Input (MMBTU)~~	~~SO2 Limit (lbs/hr)~~
~~#7~~	~~154.5~~	~~479~~
~~#8~~	~~154.21~~	~~478~~

~~**[45CSR§10-3.1.e.]**~~

~~4.1.8. To ensure compliance with the HAP PTE, the total natural gas consumption for the combination of Boilers 7, 8, 9, 10, and 11 shall not exceed 3,949 * 10^6 cubic feet per year on a rolling 12-month basis.~~
~~**[45CSR§30-12.7.]**~~

4.2. Monitoring Requirements

4.2.1. Reserved. ~~Compliance with the particulate matter limits of 4.1.6 and the SO2 limits of Condition 4.1.7 shall be shown by following the approved Rule 2 and 10 Monitoring Plan, submitted on February 28, 2001. These plans are attached as Appendix A and B to this Permit.~~
~~**[45CSR2 and 10 Monitoring Plan]**~~

4.3. Testing Requirements

4.3.1. Reserved. ~~No testing shall be required for units required to burn natural gas under Condition 4.1.3, Boilers Number 7 and Number 8.~~
~~**[Consent Order CO-SIP-2000-02 (Condition V.2.)]**~~

4.4. Recordkeeping Requirements

4.4.1. Reserved. ~~The Permittee shall maintain records of the date, time and duration and magnitude of emissions of any malfunction in the operation of the following sources: Boilers Number 7 and Number 8, as well as any malfunction of air pollution control equipment or any periods during which a control device was inoperative.~~ ~~**[Consent Order CO-SIP-2000-02 (Condition VI.2.)]**~~

~~4.4.2. Continual compliance with the Particulate Matter and Sulfur Dioxide limits for Boilers Number 7 and Number 8 shall be demonstrated as follows:~~

~~i. Demonstrate that natural gas was the only fuel used.~~

~~ii. Continual compliance shall be demonstrated by maintaining records of fuel usage, as well as any instances of startup or shutdown. Such records shall be maintained on site for a period of no less than five (5) years and shall be made available to the Secretary or his duly authorized representative upon request.~~

~~**[45CSR2 and 10 Monitoring Plan]**~~

4.5. Reporting Requirements

4.5.1. Reserved. ~~The Permittee shall report to the Secretary, by telephone or telefax, any malfunction of such source or its air pollution control equipment which results in any excess SO2 emission rate within twenty-four (24) hours of becoming aware of such condition. The Permittee shall file a written report concerning the malfunction with the Secretary 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 total amount of excess emissions discharged during the malfunction period;~~

~~D. The maximum emission rate determined during the malfunction in units of the applicable missions standard;~~

~~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.~~

~~**[Consent Order CO-SIP-2000-02 (Condition VI.3.)]**~~

4.6. Compliance Plan

Reserved. ~~N/A~~

5.0 Source-Specific Requirements [Boiler House #2: 9300-648, 9300-501, 9300-720]

5.1. Limitations and Standards

5.1.1. Boiler #11 shall be limited to a maximum designed heat input of 98 x 10^6 BTUs per hour.
[45CSR13, Permit No. R13-2677 - (Condition 4.1.1.) (9300-720)]

5.1.2. Fuel supplied to Boiler #11 shall be limited to natural gas with a maximum heat content of 1,143 BTUs per cubic foot.
[45CSR13, Permit No. R13-2677 - (Condition 4.1.2.) (9300-720)]

5.1.3. The natural gas consumption of Boiler #11 shall not exceed a maximum of 85,773 cubic feet per hour and 751.6 x 10^6 cubic feet per year.
[45CSR13, Permit No. R13-2677 - (Condition 4.1.3.) (9300-720)]

5.1.4. Emissions released from Boiler #11 shall be limited to the pollutants and associated emission rates as shown in Table 5.1.4.

Table 5.1.4.

Source	Pollutant	Maximum Emission Rate	
		Hourly (lb/hr)	Annual (TPY)
Boiler #11	NO_X	3.2	13.9
	CO	7.2	31.6
	SO_2	0.1	0.2
	PM_{10}	0.7	3.0
	VOC	0.5	2.1

[45CSR13, Permit No. R13-2677 - (Condition 4.1.4.) Compliance with this streamlined PM limit assures compliance with 45CSR§2-4.1.b. Compliance with this streamlined SO2 limit assures compliance with 45CSR§10-3.1.e. (9300-720)]

5.1.5. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1, 45CSR13, Permit No. R13-2677 - (Condition 4.1.5.) (9300-648, 9300-501, 9300-720)]

5.1.6. The visible emission standards set forth in Condition 5.1.5 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.
[45CSR§2-9.1. (9300-648, 9300-501, 9300-720)]

5.1.7. At all times, including periods of start-ups, shutdowns, and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emissions observations, review of operating and maintenance procedures, and inspection of the source.

[45CSR§2-9.2. (9300-648, 9300-501, 9300-720)]

5.1.8. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

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

2. Excess opacity does not exceed 40%.

b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 45CSR§2-9.3.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

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

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

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

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

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

6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[**45CSR§2-9.3. (9300-648, 9300-501, 9300-720)]**

5.1.9. The #9 boiler shall only use natural gas as fuel. Emissions from the #9 boiler shall not exceed 15.7 lbs/hr for particulate matter and 86 lbs/hr of SO2.
[45CSR§30-12.7, 45CSR13, Permit No. R13-26 Amended, 45CSR§2-4.1.b, 45CSR§10-3.1.e, and Consent Order CO-SIP-2000-02 Condition IV.3.C. (9300-648)]

5.1.10. The #10 boiler shall only use natural gas as fuel. Emissions from the #10 boiler shall not exceed 11.4 lbs/hr for particulate matter and 62.5 lbs/hr of SO2.
[45CSR§30-12.7, 45CSR13, Permit No. R13-138, 45CSR§2-4.1.b, 45CSR§10-3.1.e, and Consent Order CO-SIP-2000-02 Condition IV.3.C. (9300-501)]

5.1.11. To ensure compliance with the HAP PTE, the total natural gas consumption for the combination of Boilers ~~7, 8,~~ 9, 10, and 11 shall not exceed ~~3.949~~ 3,949 * 10^6 cubic feet per year on a rolling 12-month basis.
[**45CSR§30-12.7.]**

5.2. Monitoring Requirements

N/A

5.3. Testing Requirements

N/A

5.4. Recordkeeping Requirements

5.4.1. Compliance with Conditions 5.1.2 and 5.1.3 of this permit shall be demonstrated by maintaining records of Boiler #11's hours of operation and associated fuel consumption. Such records shall include, but not be limited to, the associated monthly averaged hourly and annual fuel consumption rates during boiler start-up and routine operation.
[45CSR13, Permit No. R13-2677 - (Condition 4.4.4.) (9300-720)]

5.4.2. The Permittee shall maintain records of the date, time and duration and magnitude of emissions of any malfunction in the operation of the following sources: Boilers Number 9 and Number 10 as well as any malfunction of air pollution control equipment or any periods during which a control device was inoperative.
[Consent Order CO-SIP-2000-02 (Condition VI.2.) (9300-648, 9300-501)]

5.4.3. Regarding Boiler #9 and #10, the permittee shall keep records of the following:
a. Natural gas usage rates once per eight (8) hour shift.
b. Steam production rate on a two hour basis.
[45CSR13, Permit No. R13-26 Amended and R13-138. (9300-648, 9300-501)]

5.4.4. The Permittee shall record and maintain records of the amount of natural gas combusted during each calendar month.
[45CSR16, 40CFR§60.48c(g)(2), 45CSR13, Permit No. R13-2677 - (Condition 4.1.6.) (9300-720)]

5.4.5. The Permittee shall keep the records that are required by Condition 5.4.4 for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40CFR§63.10(b)(1). The Permittee can keep the records off site for the remaining 3 years.

[45CSR16, 40CFR§60.48c(i), 45CSR13, Permit No. R13-2677 - (Condition 4.1.6.) (9300-720)]

5.5. Reporting Requirements

5.5.1. The Permittee shall report to the Secretary, by telephone or telefax, any malfunction of such source or its air pollution control equipment which results in any excess SO2 emission rate within twenty-four (24) hours of becoming aware of such condition. The Permittee shall file a written report concerning the malfunction with the Secretary 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 total amount of excess emissions discharged during the malfunction period;
D. The maximum emission rate determined during the malfunction in units of the applicable missions standard;
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.
[Consent Order CO-SIP-2000-02 (Condition VI.3.) (9300-648, 9300-501)]

5.6. Compliance Plan

N/A

6.0 Source-Specific Requirements [Environmental Control Department]

6.1. Limitations and Standards

6.1.1. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment efficiency shall be reviewed by the Director. No person shall cause, suffer, allow or permit the addition of sulfur oxides as described above unless written approval for such addition is provided by the Director.
[45CSR§2-4.4. (033-040)]

6.1.2. The visible emission standards set forth in 45CSR§2-3 shall apply at all times except in periods of start-ups, shutdowns and malfunctions. Where the Director believes that start-ups and shutdowns are excessive in duration and/or frequency, the Director may require an owner or operator to provide a written report demonstrating that such frequent start-ups and shutdowns are necessary.
[45CSR§2-9.1. (033-040)]

6.1.3. At all times, including periods of start-ups, shutdowns, and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emissions observations, review of operating and maintenance procedures, and inspection of the source.
[45CSR§2-9.2. (033-040)]

6.1.4. The owner or operator of a fuel burning unit(s) subject to 45CSR2 shall report to the Director any malfunction of such unit or its air pollution control equipment which results in any excess particulate matter emission rate or excess opacity as provided in one of the following:

a. Excess opacity periods meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director:

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

2. Excess opacity does not exceed 40%.

b. The owner or operator shall report to the Director any malfunction resulting in excess particulate matter or excess opacity, not meeting the criteria set forth in 45CSR§2-9.3.a, by telephone, telefax, or e-mail by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Director within thirty (30) days providing the following information:

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

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

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

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

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

6. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3. (033-40)]

6.1.5. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1. Compliance with this streamlined opacity limit will also show compliance with 45CSR§6-4.3. (033-40)]

6.1.6. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air.
[45CSR§6-4.5. (033-40, 5300-580)]

6.1.7. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emissions of objectionable odors.
[45CSR§6-4.6. (033-40, 5300-580)]

6.1.8. The following maximum emission rates from the fluidized bed incinerator shall not be exceeded for the specified air pollutants, from the incinerator:

	lbs/hr	TPY
Particulate Matter	4.2	16.8
Sulfur Dioxide	7.1	28.4
Nitrogen Oxides	8.5	26.4
Carbon Monoxide	3.3	13.2
Hydrocarbons	1.6	6.4
Hydrogen Chloride	2.0	5.0

[Consent Order CO-SIP-2000-02 (Condition IV.3.E.) (SO2 limit only), Permit No. R13-0842 (Condition A.1.) Compliance with this streamlined PM limit assures compliance with 45CSR§2-4.1 and 45CSR§6-4.1. Compliance with this streamlined SO2 limit assures compliance with 45CSR§10-4.3. (033-040)]

6.1.9. The incinerator shall not be operated in excess of 8,000 hours per year.
[Permit No. R13-0842 (Condition A.2.) (033-040)]

6.1.10. The maximum heat input to the incinerator from utilization of fuel oil as auxillary fuel shall not exceed 12×10^6 BTU/hr.
[Permit No. R13-0842 (Condition A.3.) (033-040)]

6.1.11. Toluene Diisocyanate Residue emissions from the TDI Residue Baghouse shall not exceed the maximum emission limitations of 1.0 lb/hr submitted in Permit Application No. 863.
[45CSR§30-12.7. Compliance with this streamlined PM limit assures compliance with 45CSR§7-4.1. (033-021)]

6.1.12. No person shall cause, suffer, allow or permit visible emissions from any storage structure(s) associated with any manufacturing process(es) that pursuant to 45CSR§7-5.1 is required to have a full enclosure and be equipped with a particulate matter control device.
[45CSR§7-3.7. (033-121)]

6.1.13. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1. (033-121)]

6.1.14. The permittee shall comply with all applicable requirements of 40CFR63, Subpart EEE, which include but are not limited to the following standards of 40CFR§63.1203:

(a) Permittee must not discharge or cause combustion gases to be emitted into the atmosphere that contain:

(1) For dioxins and furans:

(i) Emissions in excess of 0.40 ng TEQ/dscm (toxicity equivalent) corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial particulate matter control device is 400 ^{o}F or lower based on the average of the test run average temperatures.

[40CFR§63.1203(a)(1)(ii), 45CSR34. (033-040)]

(2) Mercury in excess of 130 µg/dscm corrected to 7 percent oxygen
[40CFR§63.1203(a)(2), 45CSR34. (033-040)]

(3) Lead and cadmium in excess of 240 µg/dscm, combined emissions, corrected to 7 percent oxygen
[40CFR§63.1203(a)(3), 45CSR34. (033-040)]

(4) Arsenic, beryllium, and chromium in excess of 97 µg/dscm, combined emissions, corrected to 7 percent oxygen
[40CFR§63.1203(a)(4), 45CSR34. (033-040)]

(5) For carbon monoxide and hydorcarbons:

(i) Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen. If you elect to comply with this carbon monoxide standard rather than the hydrocarbon standard under 40CFR§63.1203(a)(5)(ii), you must also document that, during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by 40CFR§63.1206(b)(7), hydrocarbons do not exceed 10 parts per million by volume during those runs, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane

[40CFR§63.1203(a)(5)(i), 40CSR34. (033-040)]

(6) Hydrochloric acid and chlorine gas in excess of 77 parts per million by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis and corrected to 7 percent oxygen
[40CFR§63.1203(a)(6), 45CSR34. (033-040)]

(7) Particulate matter in excess of 34 mg/dscm corrected to 7 percent oxygen
[40CFR§63.1203(a)(7), 45CSR34. (033-040)]

(b) (1) The permittee must achieve a destruction and removal efficiency (DRE) of 99.99% for each principle organic hazardous constituent (POHC). You must calculate DRE for each POHC from the following equation

$$DRE = [1 - (W_{out} / W_{in})] \times 100\%$$

Where: W_{in} = mass feedrate of one principal organic hazardous constituent (POHC) in a waste feedstream; and
W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere
[40CFR§63.1203(c)(1), 45CSR34. (033-040)]

Per 40CFR§631203(d), the emission limits provided by 40CFR§§63.1203(a) and (b) (Condition 6.1.14.(a)) are presented with two significant figures. Although you must perform intermediate calculations using at least three significant figures, you may round the resultant emission levels to two significant figures to document compliance
[40CFR§63.1203(d), 45CSR34. (033-040)]

6.1.15. The permittee shall operate the fluidized bed incinerator (FBI) with a functioning system that immediately and automatically cuts off the hazardous waste feed when operating parameter limits or emission standards are exceeded. An immediate and automatic cutoff shall also be triggered when the span value of any process monitor is exceeded. Any malfunctions of the monitoring equipment or automatic waste feed cutoff system shall also initiate an immediate and automatic cutoff of hazardous waste feed. These specific cutoffs are listed as follows:

Parameter	**Trigger**	**Reason**
Wastewater treatment sludge feed rate	> 15,000 lb/hr	span value
Solid organic residue feed rate	> 3,000 lb/hr	span value
Liquid organic waste feed rate (north)	> 2,500 lb/hr	span value
Liquid organic waste feed rate (south)	> 2,500 lb/hr	span value
Total waste feed rate	> 8,493 lb/hr	OPL
Inhibitor feed rate	> 40 lb/hr	span value
Inhibitor feed rate	< 15 lb/hr	OPL
Combustion temperature	> 1,500 ^{o}C	span value
Combustion temperature	< 909 ^{o}C	OPL
Combustion chamber pressure	> 0 in. w.c.	OPL
Combustion air flow rate	> 10.0 Mscfm	span value
Combustion air flow rate	> 6.6 Mscfm	OPL
Total mercury feed rate	> 0.02 lb/hr	OPL

Total semi-volatile metals (SVM) feed rate	> 1.01 lb/hr	OPL
Total low-volatile metals (LVM) feed rate	> 1.14 lb/hr	OPL
Total chlorine/chloride feed rate	> 180.3 lb/hr	OPL
Total ash feed rate	> 506.1 lb/hr	OPL
Total heat release	> 43 MMBtu/hr	OPL
ESP inlet temperature	> 300 ^{o}C	span value
ESP inlet temperature	> 202 ^{o}C	OPL
ESP total power	> 17,500 Va	span value
ESP total power	< 3,379 Va	OPL
Activated carbon feed rate	> 50 lb/hr	span value
Activated carbon feed rate	< 19.7 lb/hr	OPL
Activated carbon carrier fluid flow rate	> 200 cfm	span value
Activated carbon carrier fluid flow rate	< 70 cfm	OPL
Primary wet scrubber pH	> 14	span value
Primary wet scrubber pH	< 6	OPL
Secondary wet scrubber pH	> 14	span value
Secondary wet scrubber pH	< 6	OPL
Primary wet scrubber blowdown rate	> 100 gpm	span value
Primary wet scrubber blowdown rate	< 26.5 gpm	OPL
Secondary wet scrubber blowdown rate	> 100 gpm	span value
Secondary wet scrubber blowdown rate	< 25.3 gpm	OPL
Primary wet scrubber water flow rate	(4) > 350 gpm (1) > 250 gpm	span value
Secondary wet scrubber water flow rate	> 2,000	span value
Primary wet scrubber liquid to gas ratio	< 165.3 gal/Mscf	OPL
Secondary wet scrubber liquid to gas ratio	< 157.1 gal/Mscf	OPL
Primary wet scrubber liquid feed pressure	> 100 psig	span value
Primary wet scrubber liquid feed pressure	< 51 psig	OPL
Secondary wet scrubber liquid feed pressure	> 100 psig	span value
Secondary wet scrubber liquid feed pressure	< 54 psig	OPL

Stack CO concentration	100 ppmv	emission standard

[40CFR§63.1206(c)(3), 45CSR34. (033-040, 033-070, 033-083)]

6.1.16. The permittee must develop and implement a feedstream analysis plan and record it in the operating record. The plan must specify:

a. The parameters for which each feedstream will be analyzed to ensure compliance with the operating parameter limits (OPLs);
b. The method that will be used to obtain the analysis;
c. The method(s) used to document compliance with the applicable feedrate OPLs;
d. The analytical methods that will be used;
e. The sampling methods that will be used; and
f. The frequency of sampling and analysis to ensure accuracy.

[40CFR§63.1209(c)(2), 45CSR34. (033-040)]

6.1.17. For the purpose of ensuring compliance with the emission standards of Condition 6.1.14, the following operating parameter limits (OPLs) shall be maintained:

Parameter	**OPL**	**Averaging Period**	**Emission Standard**
Minimum combustion temperature	909°C	HRA	DRE and D/F
Maximum combustion chamber pressure	Below atmospheric	Instantaneous	Fugitive emissions
Maximum total hazardous waste feed rate	8,493 lb/hr	HRA	DRE and D/F
Maximum total heat release	43 MMBtu/hr	HRA	DRE and D/F
Maximum flue gas flow rate	6.6 Mscfm	HRA	DRE, D/F, HCl/Cl_2, SVM, LVM, and PM
Maximum ash feed rate	506.1 lb/hr	12-hr RA	PM
Maximum total chlorine feed rate	180.3 lb/hr	12-hr RA	HCl/Cl2, SVM, and LVM
Maximum mercury feed rate	0.02 lb/hr	12-hr RA	Mercury
Maximum SVM feed rate	1.01 lb/hr	12-hr RA	SVM
Maximum LVM feed rate	1.14 lb/hr	12-hr RA	LVM
Minimum inhibitor feed rate	15 lb/hr	HRA	D/F
Maximum temperature at the inlet to the ESP	202°C	HRA	D/F, SVM, and LVM

Minimum ESP total power	3,379 Va	HRA	SVM, LVM, and PM
Minimum activated carbon feed rate	19.7 lb/hr	HRA	D/F and mercury
Minimum activated carbon carrier fluid flow rate	70 scfm	HRA	D/F and mercury
Minimum primary wet scrubber liquid feed pressure	51 psig	HRA	Mercury and HCL/Cl_2
Minimum secondary wet scrubber liquid feed pressure	54 psig	HRA	Mercury and HCL/Cl_2
Minimum primary wet scrubber liquid to gas ratio	165.3 gal/Mcf	HRA	Mercury and HCL/Cl_2
Minimum secondary wet scrubber liquid to gas ratio	157.1 gal/Mcf	HRA	Mercury and HCL/Cl_2
Minimum primary wet scrubber pH	6.0	HRA	HCL/Cl_2
Minimum secondary wet scrubber pH	6.0	HRA	HCL/Cl_2
Minimum primary scrubber blowdown	26.5 gpm	HRA	D/F, SVM, LVM, and PM
Minimum secondary scrubber blowdown	25.3 gpm	HRA	D/F, SVM, LVM, and PM

[40CFR§63.1209(j), 45CSR34. (033-040, 033-070, 033-083)]

6.1.18. For the purpose of minimizing fugitive emissions, the combustion chamber pressure of the fluidized bed incinerator shall be below atmospheric pressure at all times. Combustion chamber pressure shall be monitored instantaneously and the automatic waste feed cutoff system must be engaged when negative pressure is not adequately maintained.
[40CFR§63.1209(p), 45CSR34. (033-040)]

6.1.19. The permittee must prepare and at all times operate according to startup, shutdown, and malfunction (SSM) plan requirements in accordance with 40CFR§63.6(e)(3). The SSM Plan shall include a description of potential causes of malfunctions, including releases from emergency safety vents, that may result in significant releases of Hazardous Air Pollutants (HAP), and actions the source is taking to minimize the frequency and severity of those malfunctions. The SSM plan shall:

a. Ensure that, at all times, the owner or operator operates and maintains the fluidized bed incinerator, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by the standard.

b. Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

c. Reduce the reporting burden associated with periods of startup, shutdown, and malfunction, including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation.

[40CFR§63.1206(c)(2), 40CFR§63.6(e)(3), 45CSR34. (033-040)]

6.1.20. The permittee must develop and at all times operate according to an Operation and Maintenance (O&M) Plan that describes in detail procedures for operation, inspection, maintenance, and corrective measures for all components of the combustor, including associated pollution control equipment, that could affect emissions of regulated hazardous air pollutants.
[40CFR§63.1206(c)(7), 45CSR34. (033-040)]

6.1.21. The permittee must prepare a continuous monitoring system (CMS) performance evaluation plan to implement the CMS quality control program and specify how the source will maintain calibration of the CMS and minimize malfunctions. Each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

a. Initial and any subsequent calibration of the CMS;
b. Determination and adjustment of the calibration drift of the CMS;
c. Preventive maintenance of the CMS, including spare parts inventory;
d. Data recording, calculations, and reporting;
e. Accuracy audit procedures, including sampling and analysis methods; and
f. Program of corrective action for a malfunctioning CMS.

[40CFR§63.8(d)(2) & Appendix to 40CFR63, Subpart EEE, 45CSR34. (033-040)]

6.1.22. The permittee must develop and implement an operator training and certification (OTC) program. Control room operators must be trained and certified in accordance with 40CFR§63.1206(c)(6)(iii). A minimum of one certified control room operator shall be on duty at the site at all times while the fluidized bed incinerator is in operation.
[40CFR§63.1206(c)(6), 45CSR34. (033-040)]

6.1.23. 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, except as noted in Condition 6.1.24.
[45CSR§7-3.1. (033-021, 033-207, 033-221)]

6.1.24. The provisions of Condition 6.1.23 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.
[45CSR§7-3.2. (033-021, 033-207, 033-221)]

6.1.25. Particulate matter emissions from the PAC silo baghouse shall not exceed 0.01 lbs/hr. Particulate matter emissions from the Sulfur silo baghouse shall not exceed 0.05 lbs/hr.
[45CSR§30-12.7, 45CSR§7-4.1, 45CSR13, Permit No. R13-842. (033-207, 033-221)]

6.1.26. No waste material with a vapor pressure greater than 5.2 kPA (0.75 psia) shall be stored in the new FBI Waste Tank.
[Permit No. R13-0842 (Condition A.8.) (9100-772)]

6.1.27. Waste flow from the new FBI Waste Tank to the fluidized bed incinerator shall not exceed 5.32 MM lb/yr.
[Permit No. R13-0842 (Condition A.9.) (9100-772)]

6.1.28. The carbon drum on the exhaust side of the new FBI Waste Tank shall be replaced at least once per year.
[Permit No. R13-0842 (Condition A.10.) (9100-772)]

6.2. Monitoring Requirements

6.2.1. Compliance with the particulate matter and SO2 limits of Condition 6.1.8 shall be shown by following the approved Rule 2 and 10 Monitoring Plan, submitted on February 28, 2001. These plans are attached as Appendix A and B to this Permit.
[45CSR2 and 10 Monitoring Plan]

6.2.2. Compliance with the 1.0 lb/hr Toluene Diisocyanate Residue emission limitation established for the TDI Residue baghouse (033-021) shall be demonstrated as described below:

a. The Permittee shall determine and keep records of TDI Residue usage. The Permittee shall keep such records on site.

b. The permittee shall practice the proper operation of the dust collection system, which includes conducting pressure drop measurements on a semi-monthly basis.

[45CSR§30-5.1.c.]

6.2.3. Maximum hourly sulfur dioxide emissions shall be determined by a continuous sulfur dioxide analyzer. The SO_2 analyzer shall meet the requirements set forth in 40CFR60, Appendix B, Performance Specification 2. The Company shall, by written notice, inform the Secretary of the dates of installation and certification testing of the SO_2 analyzer.
[Consent Order CO-SIP-2000-02 (Condition V.5.), Permit No. R13-0842 (Condition A.4.)]

6.2.4. Sulfur dioxide and nitrogen oxides emissions shall be determined by monthly totalization of continuous hourly sulfur dioxide and nitrogen oxides analyzers. The facility shall submit quarterly reports showing the total mass of sulfur dioxide and nitrogen oxides, and showing the year to date total in tons per year of sulfur dioxide and nitrogen oxides emissions. These reports will be due no later than fifteen (15) days following the end of the previous quarter, after the installation of the SO_2 analyzer.
[Permit No. R13-0842 (Condition A.5.)]

6.2.5. A powdered activated carbon (PAC) system may be constructed. It shall add the PAC to the fluid-bed incinerator's flue gas stream prior to the wet scrubbing system. Storage of the PAC shall be in a silo, with emissions from its vent controlled by a fabric filter. The fabric filter shall be inspected and maintained on a regular basis. During loading of the silo, visual observation, for emissions from the stack and fugitive emissions from the filter, shall be conducted. The observations shall be noted in the daily operating record.
[Permit No. R13-0842 (Condition A.6.)]

6.2.6. At least quarterly, visual emission checks of each emission point subject to an opacity limit shall be conducted. For units emitting directly into the open air from points other than a stack outlet, visible emissions are to include

visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a,b within twenty-four (24) hours. However, a 45CSR§7A-2.1.a,b evaluation shall not be required more than once per month per emission unit. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site for a period of no less than five (5) years. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer.
[45CSR§30-5.1.c (033-021, 033-207, 033-221)]

6.2.7. Compliance with the 0.01 lbs/hr particulate matter emission limitation established for the PAC silo baghouse (033-207) and 0.05 lbs/hr particulate matter emission limitation established for the Sulfur Silo baghouse (033-221) shall be demonstrated as described below:

a. The Permittee shall determine and keep records of Powdered Activated Carbon and Sulfur usage. The Permittee shall keep such records on site.

b. The permittee shall practice the proper operation of the dust collection systems, which includes conducting pressure drop measurements on a quarterly basis.

[45CSR§30-5.1.c.]

6.3. Testing Requirements

6.3.1. Any emissions test conducted to determine compliance with the hourly emissions limitations set forth in Condition 6.1.8 of this permit shall be conducted during periods which are representative of the maximum normal emission rates for each of the specified pollutants. It shall be the responsibility of the permittee to clearly demonstrate that such tests are representative of the maximum emission rates with respect to waste firing rates and practices, waste sulfur content, and other parameters potentially affecting pollutant emission rates.
[Permit No. R13-0842 (Condition B.3.)]

6.4. Recordkeeping Requirements

6.4.1. The Permittee shall maintain records of the date, time and duration and magnitude of emissions of any malfunction in the operation of the following sources Fluidized Bed Incinerator (033-040), as well as any malfunction of air pollution control equipment or any periods during which a control device was inoperative. The Permittee shall maintain these records on site for a period of not less than five (5) years.
[Consent Order CO-SIP-2000-02 (Condition VI.2.)]

6.4.2. The permittee shall maintain the following records to be made available at the request of the Secretary, or his duly authorized representative:
(a) Hourly feed rates of wastes and auxiliary fuel.
(b) Hours of operation of the incinerator, including date and time of automatic waste feed cut-off.
(c) Vapor pressure data for each shipment of waste material stored in the FBI Waste Tank.
(d) Change-out dates for the FBI Waste Tank's carbon drum.

Records shall be maintained for at least three (3) years and may be integrated with any records required under DAQ Regulation 25 permit for this incinerator.
[Permit No. R13-0842 (Condition B.5.)]

6.4.3. The permittee must keep a copy of all data recorded by continuous monitoring systems (CMS) (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods) and copies of all notification, reports, plans and other documents submitted to the Administrator in a form suitable and readily available for expeditious inspection and review**.**
[40CFR§§63.10(b) & (c), 45CSR34. (00G-04)]

6.4.4. The permittee must maintain a record of changes that will not adversely affect compliance with the emission standards or operating requirements, and must document the change upon making such change.
[40CFR§63.1206(b)(5)(ii), 45CSR34. (00G-04)]

6.4.5. The permittee must maintain a copy of the calculation of the hazardous waste residence time for the fluidized bed incinerator, and include the calculation in the operating log.
[40CFR§63.1206(b), 45CSR34. (033-040)]

6.4.6. The permittee shall maintain a copy of the Start-up, Shutdown, and Malfunction (SSM) Plan on site.
[40CFR§63.1206(c)(2)(iv), 45CSR34. (033-040)]

6.4.7. The permittee shall keep a copy of any documentation of investigation and evaluation of excessive exceedences during malfunctions.
[40CFR§63.1206(c)(2)(v)(A)(3)(ii), 45CSR34. (033-040)]

6.4.8. The permittee shall keep a copy of any documentation of investigation and corrective measures taken for any automatic waste feed cutoffs that result in an exceedance of an emission standard of operating parameter limit.
[40CFR§63.1206(c)(3)(v), 45CSR34. (033-040)]

6.4.9. The permittee shall keep a copy of any documentation and results of the automatic waste feed cutoff operability testing.
[40CFR§63.1206(c)(3)(vii), 45CSR34. (033-040)]

6.4.10. The permittee shall keep a copy of the Operator Training and Certification program.
[40CFR§63.1206(c)(6)(vii), 45CSR34. (033-040)]

6.4.11. The permittee shall keep a copy of the Operation and Maintenance (O&M) Plan.
[40CFR§63.1206(c)(7)(i)(D), 45CSR34. (033-040)]

6.4.12. The permittee shall keep a copy of the Feedstream Analysis Plan.
[40CFR§63.1209(c)(2), 45CSR34. (033-040)]

6.4.13. The permittee shall maintain documentation that the specification for activated carbon and dioxin/furan inhibitor are equivalent in level of control and effectiveness to that used in the Compliance Performance Test (CPT).
[40CFR§§63.1209(k)(6)(iii), (k)(7)(ii), and (k)(9)(ii), 45CSR34. (033-040)]

6.4.14. The permittee shall keep a copy of all documentation of compliance.
[40CFR§63.1211(c), 45CSR34. (033-040)]

6.5. Reporting Requirements

6.5.1. When demonstrating compliance using a reference test method under 40 CFR part 60, Appendix A, the Permittee shall be required to submit a test protocol to the Secretary for approval at least thirty (30) days prior to the projected test dates. The Secretary shall be provided written notice of the actual test dates after approval of the test protocol, but not less than fifteen (15) days prior to the first date of testing.
[45CSR§30-5.1.c.]

6.5.2. The Permittee shall report to the Secretary, by telephone or telefax, any malfunction of such source or its air pollution control equipment which results in any excess SO2 emission rate within twenty-four (24) hours of becoming aware of such condition. The Permittee shall file a written report concerning the malfunction with the Secretary withing 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 total amount of excess emissions discharged during the malfunction period;
D. The maximum emission rate determined during the malfunction in units of the applicable missions standard;
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.

[Consent Order CO-SIP-2000-02 (Condition VI.3.)]

6.5.3. In accordance with 40CFR§60.7(c), the owner or operator shall submit an excess emissions and monitoring systems performance report for sulfur dioxide and nitrogen oxides to the Director on a quarterly basis. All reports shall be postmarked by the fifteenth day following the end of each calendar quarter. Written reports of excess emissions shall include the following information:

(a) The magnitude of excess emission computed in accordance with 40CFR§60.13(h), and conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(b) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction, the corrective action taken or preventative measures adopted.

(c) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(d) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

The summary report form shall contain the information and be in the format shown in Figure 1 of 40CFR§60.7(d), unless otherwise specified by the Director. One summary report form shall be submitted for each of the following pollutants: sulfur dioxide and nitrogen oxides. The summary report shall follow the guidelines set forth in 40CFR§60.7(d)(1) and 40CFR§60.7(d)(2).

The owner or operator shall adhere to the guidelines set forth in 40CFR§60.7(e).

In addition, sulfur dioxide and nitrogen oxides emissions shall be determined by monthly totalization of

continuous hourly sulfur dioxide and nitrogen oxides analyzers. The facility shall submit quarterly reports showing the total mass of sulfur dioxide and nitrogen oxides, and showing the year to date total in tons per year of sulfur dioxide and nitrogen oxides emissions. These reports will be due no later than fifteen (15) days following the end of the previous quarter, after the installation of the SO_2 analyzer.
[Permit No. R13-0842 (Condition B.6, B.8, and B.9.), Consent Order CO-SIP-2000-02 (Condition V.5.)]

6.5.4. The permittee shall submit semi-annual reports on startups, shutdowns and malfunctions. The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period.
[40CFR§63.10(d)(5)(i), 45CSR34. (033-040)]

6.5.5. The permittee must submit semiannual reports on excessive emissions and continuous monitoring system performance reports and summary report. For each set of 10 exceedances of an emission standard or operating requirement while hazardous waste remains in the combustion chamber during a 60-day block period, you must submit a written report within 5 calendar days of the 10th exceedance documenting the exceedances and results of the investigation and corrective measures taken**.**
[45CSR16, 40CFR§60.10(e)(3), 40CFR§63.1206(c)(3)(vi), 45CSR34. (033-040)]

6.5.6. The permittee shall report immediately on startups, shutdowns and malfunctions if necessary. Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event.
[40CFR§63.10(d)(5)(ii), 45CSR34. (033-040)]

6.6. Compliance Plan

N/A

7.0 Source-Specific Requirements [HCL and SL]

7.1. Limitations and Standards

7.1.1. The maximum total throughput of 36% HCl shall not exceed 48,000,000 gallons in any twelve rolling month period.
[45CSR§30-12.7.]

7.1.2. Emissions from the HCl Storage Tanks 1501, 1502, and 1503 (5300-648, 5300-021, and 5300-545) shall each be vented to one of the following Scrubbers; 5300-052, 5300-624, and 5300-701.
[45CSR§30-12.7. (5300-648, 5300-021, 5300-545)]

7.1.3. The flow rate of the scrubber liquor of each Scrubber in the one tank scrubbing system shall be maintained at greater than or equal to 6 gallons per minute.
[45CSR§30-12.7. (5300-052, 5300-624, 5300-701)]

7.1.4. No person shall cause, suffer, allow, or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in Condition 7.1.5.
[45CSR§7-3.1. (15NN and 15OO)]

7.1.5. The provisions of Condition 7.1.4. 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.
[45CSR§7-3.2. (15NN and 15OO)]

7.1.6. 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 of 45CSR7.

Hydrochloric acid mist and/or vapor for source operations installed after July 1, 1970: 210 mg/m^3

[45CSR§7-4.2 and Table 45-7B. (15NN and 15OO)]

7.1.7. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 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.
[45CSR§7-9.1. (15NN and 15OO)]

7.2. Monitoring Requirements

7.2.1. The Permittee shall monitor the amount of HCl ~~received from off-site~~ transferred on a daily basis and summarize monthly. The total amount shall be assumed to be equally distributed among the three storage tanks for the purposes of emissions calculations.
[45CSR§30-5.1.c.]

7.2.2. The Permittee shall monitor the flow rate of scrubber liquor to Scrubbers 5300-052, 5300-624, and 5300-701 and summarize monthly.
[45CSR§30-5.1.c.]

7.2.3 A routine program shall be established and performed to ensure the minimization of fugitive emissions. This program shall include:
a) A minimum of weekly walk-throughs to examine equipment for leaks using visual and olfactory means.
b) The documentation of any equipment leaks.
c) Prompt isolation or repair of any leaks.
[45CSR§30-5.1.c.]

7.2.4. The Permittee shall monitor the amount of isocyanates transferred on a daily basis and summarize monthly. The total amount of isocyanates shall be assumed to be equally distributed among the all storage tanks for the purposes of emissions calculations.
[45CSR§30-5.1.c]

7.3. Testing Requirements
N/A

7.4. Recordkeeping Requirements

7.4.1. The Permittee shall maintain monthly summaries of the following records:
a. Amount of HCl transferred
b. Water flow rate to Scrubbers 5300-052, 5300-624, and 5300-701.
c. A record of walk-throughs to examine equipment for leaks.
[45CSR§30-5.1.c.]

7.4.2. The Permittee shall maintain records of the isocyanates transferred in the HCL and SL Section on a rolling 12-month basis.
[45CSR§30-5.1.c.]

7.5. Reporting Requirements
N/A

7.6. Compliance Plan
N/A

8.0 Source-Specific Requirements [Polyols]

8.1. Limitations and Standards

8.1.1. Emissions to the atmosphere of regulated air pollutants shall not exceed the hourly and annual limits in the following table:

Emission Point ID #	Sources Vented through this Emission Point	Pollutant	Emission Limit	
			PPH	TPY
EP1 {Scrubber 011-1159}	Eight Reactors {011-027.1R, 011-027.2R, 011-027.3R, 011-027.4R, 011-027.5R, 011-027.6R, 011-027.9R, and 011-027.10R} Eight Neutralizers {011-034.1, 011-034.2, 011-034.3, 011-034.4, 011-034.5, 011-034.6, 011-034.7, and 011-034.8}	Ethylene Oxide†	0.69	0.46
		Propylene Oxide†	0.28	1.22
		Ethylene Glycol‡	0.01	0.01
		Diethylene Glycol‡	0.01	0.01
		VOC	1.83	5.41
		Sulfuric Acid	0.01	0.01
EP3B	Far East Blend Tank Vent (011-740)	VOC	0.01	0.01
		ODS	154*	13.77
EP3C	PVP60A/B {East Blend Tank Vent (011-610)}	VOC	0.01	0.01
		ODS	154*	13.77
EP3E	PVP62A/B {Middle Blend Tank Vent (011-115.1)}	VOC	0.01	0.01
		ODS	154*	13.77
EP3G	PVP64A/B {West Blend Tank Vent (011-115.2)}	VOC	0.01	0.01
		ODS	154*	13.77
EP4	STV38 {NIAX 3428 storage tank (011-543)}	VOC	0.05	0.16
EP7	STV41 {Fyrol PCF storage tank (011-540)}	VOC	0.05	0.17
EP15	STV1 (Polyol storage tank (011-87.01)}	VOC	0.03	0.08
EP16	STV2 (Polyol storage tank (011-87.02)}	VOC	0.03	0.08
EP17	STV3 {Polyol storage tank (011-87.03)}	VOC	0.03	0.08
EP18	STV4 {Polyol storage tank (011-87.04)}	VOC	0.03	0.08
EP19	STV5 {Polyol storage tank (011-87.05)}	VOC	0.03	0.08
EP20	STV6 {Polyol storage tank (011-87.06)}	VOC	0.03	0.08
EP21	STV7 {Polyol storage tank (011-87.07)}	VOC	0.03	0.08
EP22	STV8 {Polyol storage tank (011-87.08)}	VOC	0.03	0.08
EP23	STV9 {Polyol storage tank (011-87.09)}	VOC	0.03	0.08
EP24	STV10 {Polyol storage tank (011-87.10)}	VOC	0.03	0.08
EP25	STV11 {Polyol storage tank (011-87.11)}	VOC	0.03	0.08

Emission Point ID #	Sources Vented through this Emission Point	Pollutant	Emission Limit	
			PPH	TPY
EP26	STV12 {Polyol storage tank (011-87.12)}	VOC	0.03	0.08
EP27	STV13 {Polyol storage tank (011-87.13)}	VOC	0.03	0.08
EP28	STV14 {Polyol storage tank (011-87.14)}	VOC	0.03	0.08
EP29	STV15 {Polyol storage tank (011-87.15)}	VOC	0.03	0.08
EP30	STV16 {Polyol storage tank (011-86.1)}	VOC	0.05	0.18
EP31	STV17 {Polyol storage tank (011-86.2)}	VOC	0.05	0.18
EP32	STV18 {Polyol storage tank (011-86.3)}	VOC	0.05	0.18
EP33	STV19 {Polyol storage tank (011-86.4)}	VOC	0.05	0.18
EP34	STV20 {Polyol storage tank (011-86.5)}	VOC	0.05	0.18
EP35	STV21 {Polyol storage tank (011-86.6)}	VOC	0.05	0.18
EP36	STV22 {Polyol storage tank (011-86.7)}	VOC	0.03	0.08
EP37	STV23 {Polyol storage tank (011-170.1)}	VOC	0.29	1.00
EP38	STV24 {Polyol storage tank (011-593)}	VOC	0.03	0.08
EP40	STV26 {Polyol storage tank (011-742)}	VOC	0.03	0.05
EP42	STV27 {SW blend (E-9242) storage tank (011-662)}	VOC	0.24	1.03
EP43	STV28 {SE blend (E-9242) storage tank (011-611.1)}	VOC	0.24	1.03
EP44	STV29 {East blend (PS-2502A) storage tank (011-570.1)}	VOC	0.24	1.03
EP45	STV30 {Middle blend (E-8206) storage tank (011-570.2)}	VOC	0.24	1.03
EP46	STV31 {West blend (E-9737) storage tank (011-570.3)}	VOC	0.24	1.03
EP47	PVP53 {Filter feed tank (011-163.1)}	VOC	0.14	0.48
EP60	Cold glycol tank (011-081)	Ethylene Glycol‡ VOC	0.01 0.01	0.01 0.01
EP61	Hot glycol tank (011-012)	Ethylene Glycol‡ VOC	0.01 0.01	0.01 0.01
EP66A	Rail car loading (001-001)	VOC	1.14	4.99
EP66B	Rail car loading (001-002)	VOC	1.14	4.99
EP66C	Rail car loading (001-003)	VOC	1.14	4.99
EP66D	Rail car loading (001-004)	VOC	1.14	4.99
EP66F	Rail car loading (001-005)	VOC	1.14	4.99
EP67A	Trailer loading (002-001)	ODS	93*	3.54
EP67B	Trailer loading (002-002)	ODS	93*	3.54

Emission Point ID #	Sources Vented through this Emission Point	Pollutant	Emission Limit	
			PPH	TPY
EP67C	Trailer loading (002-003)	VOC ODS	1.14 93*	4.44 3.54
EP67D	Trailer loading (002-004)	VOC ODS	1.14 93*	4.44 3.54
EP68A	Trailer loading (003-001)	VOC ODS	1.14 93*	4.44 3.54
EP68B	Trailer loading (003-002)	VOC ODS	1.14 93*	4.44 3.54
EP69A	Trailer loading (004-001)	VOC ODS	1.14 93*	4.44 3.54
EP69B	Trailer loading (004-002)	VOC ODS	1.14 93*	4.44 3.54
EP70	Drum/tote filling (005)	VOC ODS	1.14 93*	4.99 1.44
EP71	Trailer loading (006)	VOC ODS	1.14 93*	4.44 3.54
EP72	STV32 Storage Tank	VOC	0.50	2.00

* Emission limit is in pounds per batch (PPB)
† Toxic Air Pollutant (TAP).
‡ Hazardous Air Pollutant (HAP).
T Trace quantities.
VOC Volatile Organic Compound
ODS Ozone Depleting Substance
PM_{10} Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers.
[45CSR13, Permit No. R13-2443 -(Condition A.1.)]

8.1.2. The following emission points have trace emissions of regulated air pollutants. The permittee shall notify the Director of the Division of Air Quality prior to any change of service of the following equipment for the use with a compound with a higher vapor pressure than that currently utilized and document any change in potential emissions.

Emission Point ID #	Sources Vented through this Emission Point	Pollutant
EP3A	PVP59A/B {Far East Blend Premix Tank (011-741)}	VOC
EP3D	PVP61A/B {East Blend Premix Tank (011-609.3)}	VOC
EP3F	PVP63A/B {Middle Blend Premix Tank (011-609.1)}	VOC
EP3H	PVP65A/B {West Blend Premix Tank (011-609.2)}	VOC
EP3I	Neutralizer Blend Tank (011-034.3)	VOC
EP3J	Wiped Film Evaporator (011-051.1)	VOC
EP5	STV39 {Propylene glycol storage tank (011-569)}	VOC

Emission Point ID #	Sources Vented through this Emission Point	Pollutant
EP6	STV40 {Glycerine storage tank (011-015)}	VOC
EP8	PVP42A, PVP42B, PVP42C {o-TDA storage tank (011-735)}	VOC
EP9	STV43 {m-TDA storage tank (011-137)}	VOC
EP10	STV44 {Ethylene diamine storage tank (011-010)}	VOC
EP11	STV45 {Propylene glycol start media storage tank (011-160.1)}	VOC
EP12	STV46 {Glycerine start media storage tank (011-160.2)}	VOC
EP13	STV47 {93% Sulfuric acid storage tank (011-019)}	Sulfuric Acid
EP14	STV48 {46% KOH storage tank (011-513)}	*
EP39	STV25 {Polyol (E-9143) storage tank (011-630)}	VOC
EP41	STV75 {Polyol storage tank (011-857)}	VOC
EP48	PVP71 {Evap. feed tank (011-056.1A/B)}	VOC
EP49	PVP72 {Product hold tank (011-060.1A/B)}	VOC
EP50	PVP73A {Product hold tank (011-056.2A)}	VOC
EP51	PVP73B {Product hold tank (011-056.2B)}	VOC
EP52	PVP74A {Product hold tank (011-060.2A)}	VOC
EP53	PVP74B {Product hold tank (011-060.2B)}	VOC
EP54	PVP54 {Terate 552 storage tank (011-163.2)}	VOC
EP55	East sugar weigh tank (011-789)	PM_{10}
EP56	West sugar weigh tank (011-790)	PM_{10}
EP57	Wastewater tank (011-845)	*
EP58	Wastewater tank (011-850)	*
EP59	Carbon black paste tank (011-1176)	PM_{10}

* This emission point currently does not emit any regulated air pollutant.
[45CSR13, Permit No. R13-2443 -(Condition A.2.)]

8.1.3. The total annual throughput shall not exceed 151,619,600 gallons for the following storage tanks:

Emission Point ID #	Sources Vented through this Emission Point
EP15	STV1 (Polyol storage tank (011-87.01)}
EP16	STV2 (Polyol storage tank (011-87.02)}
EP17	STV3 {Polyol storage tank (011-87.03)}
EP18	STV4 {Polyol storage tank (011-87.04)}

Emission Point ID #	Sources Vented through this Emission Point
EP19	STV5 {Polyol storage tank (011-87.05)}
EP20	STV6 {Polyol storage tank (011-87.06)}
EP21	STV7 {Polyol storage tank (011-87.07)}
EP22	STV8 {Polyol storage tank (011-87.08)}
EP23	STV9 {Polyol storage tank (011-87.09)}
EP24	STV10 {Polyol storage tank (011-87.10)}
EP25	STV11 {Polyol storage tank (011-87.11)}
EP26	STV12 {Polyol storage tank (011-87.12)}
EP27	STV13 {Polyol storage tank (011-87.13)}
EP28	STV14 {Polyol storage tank (011-87.14)}
EP29	STV15 {Polyol storage tank (011-87.15)}
EP30	STV16 {Polyol storage tank (011-86.1)}
EP31	STV17 {Polyol storage tank (011-86.2)}
EP32	STV18 {Polyol storage tank (011-86.3)}
EP33	STV19 {Polyol storage tank (011-86.4)}
EP34	STV20 {Polyol storage tank (011-86.5)}
EP35	STV21 {Polyol storage tank (011-86.6)}
EP36	STV22 {Polyol storage tank (011-86.7)}
EP37	STV23 {Polyol storage tank (011-170.1)}
EP38	STV24 {Polyol storage tank (011-593)}
EP40	STV26 {Polyol storage tank (011-742)}
EP42	STV27 {SW blend storage tank (011-662)}
EP43	STV28 {SE blend storage tank (011-611.1)}
EP44	STV29 {East blend storage tank (011-570.1)}
EP45	STV30 {Middle blend storage tank (011-570.2)}
EP46	STV31 {West blend storage tank (011-570.3)}
EP47	PVP53 {Filter feed tank (011-163.1)}

[45CSR13, Permit No. R13-2443 -(Condition A.3.)]

8.1.4. The total annual throughput shall not exceed the listed amount for the following storage tanks:

Emission Point ID #	Sources Vented through this Emission Point	Annual Throughput Limit (gallons)
EP4	STV38 {NIAX 3428 storage tank (011-543)}	1,622,800
EP7	STV41 {Fyrol PCF storage tank (011-540)}	332,300
EP8	o-TDA storage tank (011-735)	5,736,698

[45CSR13, Permit No. R13-2443 -(Condition A.4.)]

8.1.5. The daily and total annual throughput shall not exceed the listed throughput rates for the following loading areas:

Loading Area ID #	Loading Area Description	Daily Throughput (gallons)	Annual Throughput (gallons)
001	Rail car loading area	960,000	225,169,000
002	Trailer loading area	1,003,000	366,168,000
003	Trailer loading area		
004	Trailer loading area		
005	Drum/tote filling		

[45CSR13, Permit No. R13-2443 -(Condition A.5.)]

8.1.6. The portions of consent order CO-R27-91-21 pertaining to ethylene oxide and propylene oxide, including Attachments A1, A2, B1, and B2, are superceded and replaced by this permit. All other portions of consent order CO-R27-91-21 are intact and valid.
[45CSR13, Permit No. R13-2443 -(Condition A.6.) State-Enforceable Only]

8.1.7. Emission standards.

(a) Except as provided under paragraph (b) of this section, the owner or operator of an existing or new affected source shall comply with the provisions in:
(1) Sections 63.1425 through 63.1430 for process vents;
(2) Section 63.1432 for storage vessels;
(3) Section 63.1433 for wastewater;
(4) Section 63.1434 for equipment leaks;
(5) Section 63.1435 for heat exchangers;
(6) Section 63.1437 for additional test methods and procedures;
(7) Section 63.1438 for monitoring levels and excursions; and
(8) Section 63.1439 for general reporting and recordkeeping requirements.

(b) When emissions of different kinds (i.e., emissions from process vents subject to §§63.1425 through 63.1430, storage vessels subject to §63.1432, process wastewater, and/or in-process equipment subject to §63.149) are combined, and at least one of the emission streams would require control according to the applicable provision in the absence of combination with other emission streams, the owner or operator shall comply with the requirements of either paragraph (b)(1) or (2) of this section.
(1) Comply with the applicable requirements of this subpart for each kind of emission in the

stream as specified in paragraphs (a)(1) through (5) of this section; or

(2) Comply with the most stringent set of requirements that applies to any individual emission stream that is included in the combined stream, where either that emission stream would be classified as requiring control in the absence of combination with other emission streams, or the owner chooses to consider that emission stream to require control for the purposes of this paragraph.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40CFR§63.1424]

8.1.8. Process vent control requirements.

(b) *Requirements for epoxide emissions.* The owner or operator of an affected source where polyether polyol products are produced using epoxides shall reduce epoxide emissions form process vents from batch unit operations and continuous unit operations within each PMPU in accordance with either paragraph (b)(1) or (2) of this section.

(1) For new affected sources, the owner or operator shall comply with paragraph (b)(1)(i), (ii), or (iii) this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(1)(i) and (ii) of this section. If the owner or operator chooses to comply with a combination of paragraphs (b)(1)(i) and (ii) of this section, each process vent not controlled in accordance with paragraph (b)(1)(ii) of this section shall be part of the group of applicable process vents that shall then comply with paragraph (b)(1)(i) of this section.

(i) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 99.9 percent;

(ii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture, or recovery device of 20 ppmv or less; or

(iii) Maintain an emission factor of no greater than 4.43×10^{-3} kilogram epoxide emissions per megagram of product (4.43×10^{-3} pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

(2) For existing affected sources, the owner or operator shall comply with either paragraph (b)(2)(i), (ii), (iii), or (iv) of this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(ii) and (iii) of this section. If the owner or operator chooses to comply with a combination of paragraphs (b)(2)(ii) and (iii) of this section, each process vent that is not controlled in accordance with paragraph (b)(2)(iii) of this section shall be part of the group of applicable process vents that shall then comply with paragraph (b)(2)(ii) of this section. The owner or operator also has the option of complying with a combination of paragraphs (b)(2)(i) and (iii) of this section.

(i) Reduce the total epoxide emissions from each process vent using a flare;

(ii) Reduce the total epoxide emissions from the group of applicable process vents by an aggregated 98 percent;

(iii) Maintain an outlet concentration of total epoxides or TOC after each combustion, recapture or recovery devices of 20 ppmv or less; or

(iv) Maintain an emission factor of no greater than 1.69×10^{-2} kilogram epoxide emissions per megagram of product (1.69×10^{-2} pounds epoxide emissions per 1,000 pounds of product) for all process vents in the PMPU.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40CFR§63.1425]

8.1.9. Process vent annual epoxides emission factor plan requirements.

(a) *Applicability of emission factor plan requirements.* An owner or operator electing to comply with an annual epoxide emission factor limitation in §63.1425(b)(1)(iii) or (b)(2)(iv) shall develop and implement an epoxides emission factor plan in accordance with the provisions of this section.

(b) *Emission factor plan requirements.* The owner or operator shall develop an epoxides emission factor plan.

(1) If epoxide emissions are maintained below the epoxide emission factor limitation through the use of a combustion, recovery, or recapture device (without extended cookout), the owner or

operator shall develop and implement the plan in accordance with paragraph (c) of this section.

(c) *Compliance with epoxide emission factor limitation using a combustion, recovery, or recapture device.*

(1) The owner or operator shall notify the Agency of the intent to use a combustion, recovery, or recapture device to comply with the epoxide emission factor limitation in §63.1425(b)(1)(iii) or (b)(2)(iv). The owner or operator shall prepare an estimate of the annual epoxide emissions and the actual production rate in accordance with paragraphs (c)(1)(i) through (iv) of this section. This notification and emission estimate shall be submitted in the Precompliance Report as specified in §63.1439 (e)(4), or in the operating permit application, as allowed in §63.1439(e)(8).

(i) Annual uncontrolled epoxide emissions. These emission estimates shall be determined in accordance with the batch process vent group determination procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U, §63.488(b)) and shall be based on anticipated production.

(ii) A description of the combustion, recovery, or recapture device, along with the expected percent efficiency.

(iii) Annual emissions after the combustion, recovery, or recapture device. The expected annual emissions after control shall be determined using Equation 15.

$$AE_{control} = \left(AE_{uncontrolled}\right)\left[\left(1 - \frac{R}{100}\right)\right] \qquad \text{[Equation 15]}$$

Where:
$AE_{control}$ = Annual epoxide emissions after control, kg/yr.
$AE_{uncontrolled}$ = Annual uncontrolled epoxide emissions, determined in accordance with paragraph (c)(1)(i) of this section, kg/yr.
R = Expected control efficiency of the combustion, recovery, or recapture device, percent, as determined in §63.1426(c).

(iv) The actual annual production rate means the annual mass of polyether polyol product produced from the applicable PMPU. This production rate shall be for the same annual time period as the annual emission estimate as calculated in accordance with paragraph (c)(1)(iii) of this section.

(2) The owner or operator shall conduct a performance test in accordance with §63.1426(c) to determine the epoxide control efficiency of the combustion, recovery, or recapture device. The owner or operator shall then recalculate the annual epoxide emissions after control using Equation 15, except that the control efficiency, R, shall be the measured control efficiency. This information shall be submitted as part of the Notification of Compliance Status, as provided in §63.1439(e)(5).

(3) The owner or operator shall comply with the process vent monitoring provisions in §63.1429.

(4) The owner or operator shall comply with the process vent recordkeeping requirements in paragraphs §63.1430(b) through (d), and the process vent reporting requirements in §63.1430(g)(1) and (h).

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40CFR§63.1431]

8.1.10. Except as provided in 45CSR§27-3.2 and 3.3, the owner or operator of a plant that discharges or may discharge a toxic air pollutant into the open air in excess of the amount shown in 45CSR27 Table A shall employ BAT at all chemical processing units emitting the toxic air pollutant: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such regulation or standard.

[45CSR13, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-3.1 State-Enforceable only]

8.1.11. All owners and operators subject to the requirements of this rule shall, by application of BAT, prevent and control fugitive emissions to the air of toxic air pollutants as a result of leakage from equipment in toxic air pollutant service including but not limited to, pump seals, compressor seals, valves, sampling connections, open-ended lines, safety relief valves, and flanges. In no event shall any equipment standard, program, or work practice less stringent than required under 40CFR61, Subpart V be deemed to represent BAT for control of toxic air pollutant emissions: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such federal regulation and standard. Equipment to be used in toxic air pollutant service installed after the effective date of this rule shall, to the maximum extent possible, be designed and operated so as to prevent leaks of toxic air pollutants.
[45CSR13, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-4.1 State-Enforceable only]

8.1.12. Owners and operators of chemical processing units or facilities subject to the requirements of this rule shall prevent and control working and filling losses of toxic air pollutants from tanks by routing such tank emissions to BAT control devices. The Director may approve the use of floating roof storage tanks as BAT, provided that such tanks are designed and operated in a manner which minimizes toxic air pollutant emissions tanking into consideration the toxic air pollutant emission rate, tank size, and control efficiency associated with such tanks. On a case-by-case basis, the Director may exempt very small process or storage tanks or tanks storing material mixtures containing low mass fractions of toxic air pollutants from the BAT requirements taking into consideration the actual level of emissions control and/or the toxic air pollutant emission rate from the tank.
[45CSR13, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-5.1 State-Enforceable only]

8.1.13. Owners and operators of chemical processing units and/or wastewater treatment systems subject to this rule shall employ BAT to remove and control or destroy toxic air pollutants from wastewater at the source and/or apply BAT at the wastewater treatment plant to prevent or control the discharge to toxic air pollutants resulting from air stripping or evaporation: Provided, that this provision shall not be more stringent than any specifically applicable federal regulation or standard.
[45CSR13, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-6.1 State-Enforceable only]

8.1.14. Owners and operators of chemical processing units or facilities subject to the requirements of this rule shall employ BAT to prevent or control toxic air pollutant discharges in the loading and unloading of railcars and tank trucks with toxic air pollutants or material mixtures containing toxic air pollutants.
[45CSR13, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-7.1 State-Enforceable only]

8.1.15. Due to unavoidable malfunction of equipment or other conditions resulting in emissions exceeding a level established in the compliance program, emissions exceeding those provided for in this rule 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, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-12.1 State-Enforceable only]

8.1.16. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-2443 and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, Permit No. R13-2443 -(Condition C.3.)]

8.2. Monitoring Requirements

8.2.1. The following operating parameters of the ethylene oxide and propylene oxide scrubber (011-1159) shall be maintained while the polyol unit is on-line:

a) The scrubbing liquor flow rate shall maintained at 57 gpm or greater. The liquor flow rate shall be recorded at least every 15 minutes. The permittee shall report all values that are below 57 gpm and all instances when monitoring data is not collected.

b) The pH of the scrubbing liquor shall be maintained at 0.5 or lower. The permittee shall sample and test the pH of the scrubbing liquor at least once a day. The permittee shall report all values that are above 0.5 pH and all instances when monitoring data is not collected.

[Permit No. R13-2443 -(Condition B.1.)]

8.2.2. Process vent monitoring requirements.

(a) *Monitoring equipment requirements*. The owner or operator of a process vent that uses a combustion, recovery, or recapture device to comply with the process vent control requirements in §63.1425(b)(1), (b)(2), (c)(1), (c)(3), or (d) shall install monitoring equipment specified in paragraph (a)(1), (2), (3), (4), (5), (6), or (7) of this section, depending on the type of device used. Also, the owner or operator that uses a recovery or recapture device to comply with §63.1425(c)(4) shall install monitoring equipment as specified in paragraph (a)(4), (5), (6), or (7) of this section. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturers' specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(4) Where an absorber is used, a scrubbing liquor flow rate meter or a pressure monitoring device is required and should be equipped with a continuous recorder. If an acid or base absorbent is used, a pH monitoring device to monitor scrubber effluent is also required. If two or more absorbers in series are used, a scrubbing liquid flow rate meter, or a pressure monitoring device, equipped with a continuous recorder, is required for each absorber in the series. An owner or operator may submit a request to instead install the scrubbing liquid flow rate meter, or a pressure monitoring device, equipped with a continuous recorder, on only the final absorber in a series, in accordance with the alternative parameter monitoring reporting requirements in §63.1439(f).

(5) Where a condenser is used, a condenser exit temperature (product side) monitoring device equipped with a continuous recorder is required.

(7) As an alternative to paragraphs (a)(4) through (6) of this section, the owner or operator may install an organic monitoring device equipped with a continuous recorder.

(b) *Alternative parameters.* An owner or operator of a process vent may request approval to monitor parameters other than those listed in paragraph (a) of this section. The request shall be submitted according to the procedures specified in the process vent reporting and recordkeeping requirements in §63.1430(j) and the alternative parameter monitoring reporting requirements in §63.1439(f). Approval shall be requested if the owner or operator:

(3) Uses one of the combustion, recovery, or recapture devices listed in paragraph (a) of this section, but seeks to monitor a parameter other than those specified in paragraph (a) of this section.

(c) *Monitoring of bypass lines*. The owner or operator of a process vent using a process vent system that contains bypass lines that could divert a process vent stream away from the combustion, recovery, or recapture device used to comply with the process vent control requirements in §63.1425(b), (c), or (d) shall comply with paragraph (c)(1) or (2) of this section. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to paragraphs (c)(1) or (2) of this section.

(1) Properly install, maintain, and operate a flow indicator that takes a reading at least once at

approximately equal intervals of about 15 minutes. Records shall be generated as specified in the process vent reporting and recordkeeping provisions in §63.1430(d)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert emissions away from the combustion, recovery, or recapture device and to the atmosphere; or

(2) Secure the bypass line valve in the non-diverting position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and emissions are not diverted through the bypass line. Records shall be generated as specified in the process vent reporting and recordkeeping provisions in §63.1430(d)(4)(i).

(d) *Establishment of parameter monitoring levels*. Parameter monitoring levels for process vents from continuous or batch unit operations using a combustion, recovery, or recapture device to comply with the process vent control requirements in §63.1425(b), (c), or (d) shall be established as specified in paragraphs (d)(1) through (3) of this section.

(1) For each parameter monitored under paragraph (a) or (b) of this section, the owner or operator shall establish a level, defined as either a maximum or minimum operating parameter as denoted in Table 5 of this subpart (the table listing the monitoring, recordkeeping, and reporting requirements for process vents from batch unit operations), that indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart. The level shall be established in accordance with the procedures specified in the process vent control requirements in §63.1430(d). The level may be based upon a prior performance test conducted for determinating compliance with a regulation promulgated by the EPA, and the owner or operator is not required to conduct a performance test under the process vent requirements for determining organic HAP concentration, control efficiency, and aggregated organic HAP emission reductions in §63.1426, provided that the prior performance test meets the conditions of §63.1426(b)(3).

(2) The established level, along with supporting documentation, shall be submitted in the Notification of Compliance Status or the operating permit application as required in the Notification of Compliance Status requirements in §63.1439(e)(5) or in the operating permit application requirements in §63.1439(e)(8), respectively.

(3) The operating day shall be defined as part of establishing the parameter monitoring level and shall be submitted with the information in paragraph (d)(2) of this section. The definition of operating day shall specify the time(s) at which an operating day begins and ends.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40 CFR§63.1429]

8.2.3. Storage vessel provisions.

(a) For each storage vessel located at an affected source, the owner or operator shall comply with the HON storage vessel requirements of §§63.119 through 63.123 and the HON leak inspection provisions in §63.148, with the differences noted in paragraphs (b) through (p) of this section, for the purposes of this subpart.

(b) When the term "storage vessel" is used in the HON storage vessel requirements in §§63.119 through 63.123, the definition of this term in §63.1423 shall apply for the purposes of this subpart.

(c) When the term "Group 1 storage vessel" is used in the HON storage vessel requirements in §§63.119 through 63.123, the definition of this term in §63.1423 shall apply for the purposes of this subpart.

(d) When the term "Group 2 storage vessel" is used in the HON storage vessel requirements in §§63.119 through 63.123, the definition of this term in §63.1423 shall apply for the purposes of this subpart.

(e) When the HON storage vessel requirements in §63.119 refer to "December 31, 1992," the phrase "September 4, 1997" shall apply instead, for the purposes of this subpart.

(f) When the HON storage vessel requirements in §63.119 refer to "April 22, 1994," the phrase "June 1, 1999," shall apply instead, for the purposes of this subpart.

(g) The owner or operator of an affected source shall comply with this paragraph instead of §63.120(d)(1)(ii) for the purposes of this subpart. If the combustion, recovery, or recapture device used to comply with §63.119(e) is also used to comply with any of the requirements found in §§63.1425 through 63.1431 and/or §63.1433, the performance test required in or accepted by

§§63.1425 through 63.1431 and/or §63.1433 is acceptable for demonstrating compliance with the HON storage vessel requirements in §63.119(e), for the purposes of this subpart. The owner or operator will not be required to prepare a design evaluation for the combustion, recovery, or recapture device as described in §63.120(d)(1)(i), if the performance test meets the criteria specified in paragraphs (g)(1) and (2) of this section.

(1) The performance test demonstrates that the combustion, recovery, or recapture device achieves greater than or equal to the required control efficiency specified in the HON storage vessel requirements in §63.119(e)(1) or (2), as applicable; and

(2) The performance test is submitted as part of the Notification of Compliance Status required by §63.1439(e)(5).

(h) When the HON storage vessel requirements in §§63.120(d)(3)(i), 63.120(d)(5), and 63.122(g)(2) use the term "range," the term "level" shall apply instead for the purposes of this subpart.

(i) For purposes of this subpart, the monitoring plan required by the HON storage vessel requirements in §63.120(d)(2) shall specify for which combustion, recovery, or recapture device the owner or operator has selected to follow the procedures for continuous monitoring specified in §63.1438. For the combustion, recovery, or recapture device(s) for which the owner or operator has selected not to follow the procedures for continuous monitoring specified in §63.1438, the monitoring plan shall include a description of the parameter(s) to be monitored to ensure that the combustion, recovery, or recapture device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter(s), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised), as specified in §63.120(d)(2)(i).

(j) For purposes of this subpart, the monitoring plan required by §63.122(b) shall be included in the Notification of Compliance Status required by §63.1439(e)(5).

(k) When the HON Notification of Compliance Status requirements contained in §63.152(b) are referred to in §§63.120, 63.122, and 63.123, the Notification of Compliance Status requirements contained in §63.1439(e)(5) shall apply for the purposes of this subpart.

(l) When the HON Periodic Report requirements contained in §63.152(c) are referred to in §§63.120 and 63.122, the Periodic Report requirements contained in §63.1439(e)(6) shall apply for the purposes of this subpart.

(m) When other reports as required in §63.152(d) are referred to in §63.122, the reporting requirements contained in §63.1439(e)(7) shall apply for the purposes of this subpart.

(n) When the HON Initial Notification requirements contained in §63.151(b) are referred to in §63.119 through §63.123, the owner or operator shall comply with the Initial Notification requirements contained in §63.1439(e)(3), for the purposes of this subpart.

(o) When the determination of equivalence criteria in §63.102(b) are referred to in the HON storage vessel requirements in §63.121(a), the General Provisions' alternative nonopacity emission provisions in §63.6(g) shall apply for the purposes of this subpart.

(p) The compliance date for storage vessels at affected sources subject to the provisions of this section is specified in §63.1422.

(q) In addition to the records required by §63.123, the owner or operator of each storage vessel that is complying with §63.119(e) and that has an applicable monitoring plan in accordance with §63.120(d)(2) that does not specify continuous monitoring, shall maintain records of all times when the storage tank is being filled (i.e., when the liquid level in the storage vessel is being raised). These records shall consist of documentation of the time when each filling period begins and ends.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40CFR§63.1432]

8.2.4. Wastewater provisions.

(a) *Process wastewater*. Except as specified in paragraph (c) of this section, the owner or operator of each affected source shall comply with the HON wastewater requirements in §§63.132 through 63.147 for each process wastewater stream originating at an affected source, with the HON leak inspection requirements in §63.148, and with the HON requirements in §63.149 for equipment that is subject to §63.149, with the differences noted in paragraphs (a)(1) through (20) of this section. Further, the

owner or operator of each affected source shall comply with the requirements of §63.105(a) for maintenance wastewater, as specified in paragraph (b) of this section.

(1) Owners and operators of affected sources are not required to comply with the HON new source wastewater requirements in §63.132(b)(1) and §63.132(d) for the purposes of this subpart. Owners or operators of all new affected sources, as defined in this subpart, shall comply with the HON requirements for existing sources in §§63.132 through 63.149, with the exceptions noted in paragraphs (a)(2) through (20) of this section.

(2) The provisions of paragraphs (a)(2)(i), (ii), and (a)(10)(iii) of this section clarify the organic HAP that an owner or operator shall consider when complying with the requirements of §§63.132 through 63.149.

(i) Owners and operators are exempt from all requirements in §§63.132 through 63.149 that pertain solely and exclusively to organic HAP listed on Table 8 of 40 CFR part 63, subpart G.

(ii) When the HON requirements in §§63.132 through 63.149 refer to Table 9 compounds, the owner or operator is only required to consider compounds that meet the definition of organic HAP in §63.1423 and that are listed in Table 9 of 40 CFR part 63, subpart G, for the purposes of this subpart.

(iii) When §§63.132 through 63.149 refer to compounds in Table 36 of 40 CFR part 63, subpart G, or compounds in List 1 or List 2 of Table 36 of 40 CFR part 63, subpart G, the owner or operator is only required to consider compounds that meet the definition of organic HAP in §63.1423 and that are listed on Table 36 of 40 CFR part 63, subpart G, for the purposes of this subpart.

(3) When the determination of equivalence criteria in §63.102(b) is referred to in §§63.132, 63.133, and 63.137, the General Provisions' alternative nonopacity emission standard provisions in §63.6(g) shall apply for the purposes of this subpart.

(4) When the HON storage vessel requirements contained in §§63.119 through 63.123 are referred to in §§63.132 through 63.148, the HON storage vessel requirements in §§63.119 through 63.123 are applicable, with the exception of the differences referred to in the storage vessel requirements in §63.1432, for the purposes of this subpart.

(5) When the HON process wastewater reporting requirements in §63.146(a) require the submission of a request for approval to monitor alternative parameters according to the procedures specified in §63.151(f) or (g), the owner or operator requesting to monitor alternative parameters shall follow the procedures specified in §63.1439(f) for the purposes of this subpart.

(6) When the HON process wastewater recordkeeping requirements in §63.147(d) require the owner or operator to keep records of the daily average value of each continuously monitored parameter for each operating day as specified in the HON recordkeeping provisions in §63.152(f), the owner or operator shall instead keep records of the daily average value of each continuously monitored parameter as specified in §63.1439(d), for the purposes of this subpart.

(7) When §§63.132 through 63.149 refer to an "existing source," the term *existing affected source,* as defined in §63.1420(a)(2), shall apply for the purposes of this subpart.

(8) When the HON requirements in §§63.132 through 63.149 refer to a "new source," the term *new affected source,* as defined in §63.1420(a)(3), shall apply for the purposes of this subpart.

(9) When the HON process wastewater provisions in §63.132 (a) and (b) refer to the "applicable dates specified in §63.100 of subpart F of this part," the applicable compliance dates specified in §63.1422 shall apply, for the purposes of this subpart.

(10) Whenever the HON process wastewater provisions in §§63.132 through 63.147 refer to a Group 1 wastewater stream or a Group 2 wastewater stream, the definitions of these terms contained in §63.1423 shall apply, for the purposes of this subpart.

(11) When the HON control requirements for certain liquid streams in open systems, in §63.149(d), refer to "§63.100(f) of subpart F," the phrase "§63.1420(c)," shall apply for the purposes of this subpart. In addition, where §63.149(d) states "and the item of equipment is not otherwise exempt from controls by the provisions of subparts A, F, G, or H of this part," the phrase "and the item of equipment is not otherwise exempt from controls by the provisions of subparts A, F,

G, H, or PPP of this part," shall apply for the purposes of this subpart.

(12) When the HON control requirements for certain liquid streams in open systems, in §63.149(e) (1) and (2), refer to "a chemical manufacturing process unit subject to the new source requirements of 40 CFR 63.100(l) (1) or (2)," the phrase "a new affected source as described in §63.1420(a)(4)," shall apply for the purposes of this subpart.

(13) When the HON Notification of Compliance Status requirements contained in §63.152(b) are referred to in the HON process wastewater provisions in §63.138 or §63.146, the Notification of Compliance Status requirements contained in §63.1439(e)(5) shall apply for the purposes of this subpart. In addition, when the HON process wastewater provisions in §63.138 or §63.146 require that information be reported according to §63.152(b) in the HON Notification of Compliance Status, owners or operators of affected sources shall report the specified information in the Notification of Compliance Status required by §63.1439(e)(5), for the purposes of this subpart.

(14) When the HON Periodic Report requirements contained in §63.152(c) are referred to in the HON process wastewater provisions in §63.146, the Periodic Report requirements contained in §63.1439(e)(6) shall apply for the purposes of this subpart. In addition, when §63.146 requires that information be reported in the HON Periodic Reports required in §63.152(c), owners or operators of affected sources shall report the specified information in the Periodic Reports required in §63.1439(e)(6), for the purposes of this subpart.

(15) When the term "range" is used in the HON requirements in §§63.132 through 63.149, the term "level" shall be used instead, for the purposes of this subpart. This level shall be determined using the procedures specified in parameter monitoring procedures in §63.1438.

(16) When the HON process wastewater monitoring and inspection provisions in §63.143(f) specify that the owner or operator shall establish the range that indicates proper operation of the treatment process or control technique, the owner or operator shall instead comply with the requirements §63.1438 (c) or (d) for establishing parameter level maximums/minimums, for the purposes of this subpart.

(17) When the HON process wastewater provisions in §63.146(b) (7) and (8) require that "the information on parameter ranges specified in §63.152(b)(2)" be reported in the HON Notification of Compliance Status, owners and operators of affected sources are instead required to report the information on parameter levels in the Notification of Compliance Status as specified in §63.1439(e)(5)(ii), for the purposes of this subpart.

(18) For the purposes of this subpart, the owner or operator is not required to comply with the HON process wastewater emission reduction provisions in §63.138(g).

(19) When the provisions of HON process wastewater provisions in §63.139(c)(1)(ii), §63.145(d)(4), or §63.145(i)(2) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A shall comply with paragraphs (a)(19) (i) and (ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(20) The owner or operator of a facility which receives a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream, for treatment pursuant to the HON provisions in §63.132(g) is subject to the requirements of §63.132(g), with the differences identified in this section, and is not subject to the NESHAP from off- site waste and recovery operations in 40 CFR part 63, subpart DD, with respect to the received material.

(b) *Maintenance wastewater*. The owner or operator of each affected source shall comply with the HON maintenance wastewater requirements in §63.105, with the exceptions noted in paragraphs (b) (1), (2), and (3) of this section.

(1) When the HON maintenance wastewater provisions in §63.105(a) refer to "organic HAPs listed in Table 9 of subpart G of this part," the owner or operator is only required to consider compounds that meet the definition of *organic HAP* in §63.1423 and that are listed in Table 9 of 40 CFR part 63, subpart G, for the purposes of this subpart.

(2) When the term "maintenance wastewater" is used in the HON maintenance wastewater provisions in §63.105, the definition of "maintenance wastewater" in §63.1423 shall apply, for the purposes of this subpart.

(3) When the term "wastewater" is used in the HON maintenance wastewater provisions in §63.105, the definition of "wastewater" in §63.1423 shall apply, for the purposes of this subpart.

(c) *Compliance date*. The compliance date for the affected source subject to the provisions of this section is specified in §63.1422.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40CFR§63.1433]

8.2.5. Equipment leak provisions.

(a) The owner or operator of each affected source shall comply with the HON equipment leak requirements in 40 CFR part 63, subpart H for all equipment in organic HAP service, except as specified in paragraphs (b) through (g) of this section.

(b) The compliance date for the equipment leak provisions in this section is provided in §63.1422(d).

(d) When the HON equipment leak Initial Notification requirements contained in §63.182(a)(1) and §63.182(b) are referred to in 40 CFR part 63, subpart H, the owner or operator shall comply with the Initial Notification requirements contained in §63.1439(e)(3), for the purposes of this subpart. The Initial Notification shall be submitted no later than June 1, 2000 for existing sources, as stated in §63.1439(e)(3)(ii)(A).

(e) The HON equipment leak Notification of Compliance Status required by §63.182(a)(2) and §63.182(c) shall be submitted within 150 days (rather than 90 days) of the applicable compliance date specified in §63.1422 for the equipment leak provisions. The notification may be submitted as part of the Notification of Compliance Status required by §63.1439(e)(5).

(f) The Periodic Reports required by §63.182(a)(3) and §63.182(d) may be submitted as part of the Periodic Reports required by §63.1439(e)(6).

(g) If specific items of equipment, comprising part of a process unit subject to this subpart, are managed by different administrative organizations (e.g., different companies, affiliates, departments, divisions, etc.), those items of equipment may be aggregated with any PMPU within the affected source for all purposes under subpart H, providing there is no delay in achieving the applicable compliance date.

(h) The phrase "the provisions of subparts F, I, or PPP of this part" shall apply instead of the phrase "the provisions of subparts F or I of this part," and instead of the phrase "the provisions of subpart F or I of this part" throughout §§63.163 and 63.168, for the purposes of this subpart. In addition, the phrase "subparts F, I, and PPP" shall apply instead of the phrase "subparts F and I" in §63.174(c)(2)(iii), for the purposes of this subpart.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40CFR§63.1434]

8.2.6. Heat exchanger provisions.

(a) The owner or operator of each affected source shall comply with the requirements of §63.104 for heat exchange systems, with the exceptions noted in paragraphs (b) through (e) of this section.

(b) When the term "chemical manufacturing process unit" is used in §63.104, the term "polyether polyols manufacturing process unit" shall apply for the purposes of this subpart. Further, when the phrase "a chemical manufacturing process unit meeting the conditions of §63.100(b)(1) through (3) of this subpart, except for chemical manufacturing process units meeting the condition specified in §63.100(c) of this subpart" is used in §63.104(a), the term "PMPU, except for PMPU meeting the conditions specified in §63.1420(b)" shall apply for the purposes of this subpart.

(c) When the HON heat exchange system requirements in §63.104(c)(3) specify the monitoring plan retention requirements, and when §63.104(f)(1) refers to the record retention requirements in §63.103(c)(1), the provisions of the general recordkeeping and reporting requirements in §63.1439(a)

and the applicable provisions of the General Provisions in 40 CFR part 63, subpart A, as specified in Table 1 of this subpart, shall apply for the purposes of this subpart.

(d) When the HON heat exchange system requirements in §63.104(f)(2) require information to be reported in the Periodic Reports required by the HON general reporting provisions in §63.152(c), the owner or operator shall instead report the information specified in §63.104(f)(2) in the Periodic Reports required by the general reporting requirements in §63.1439(e)(6), for the purposes of this subpart.

(e) When the HON heat exchange system requirements in §63.104 refer to Table 4 of 40 CFR part 63, subpart F or Table 9 of 40 CFR part 63, subpart G, the owner or operator is only required to consider organic HAP listed in Table 4 of 40 CFR part 63, subpart F or 40 CFR part 63, Table 9 of subpart G that are also listed on Table 4 of this subpart, for the purposes of this subpart.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40CFR§63.1435]

8.3. Testing Requirements

8.3.1. Process vent requirements for determining organic HAP concentration, control efficiency, and aggregated organic HAP emission reduction for a PMPU.

(c) *Determination of organic HAP concentration and control efficiency.* Except as provided in paragraphs (a) and (b) of this section, an owner or operator using a combustion, recovery, or recapture device to comply with an epoxide or organic HAP percent reduction efficiency requirement in §63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), (c)(3)(ii), or (d)(2); and epoxide concentration limitation in §63.1425(b)(1)(ii) or (b)(2)(ii); or an annual epoxide emission limitation in §63.1425(b)(1)(iii) or (b)(2)(iv), shall conduct a performance test using the applicable procedures in paragraphs (c)(1) through (4) of this section. The organic HAP or epoxide concentration and percent reduction may be measured as total epoxide, total organic HAP, or as TOC minus methane and ethane according to the procedures specified. When conducting testing in accordance with this section, the owner or operator is only required to measure HAP of concern for the specific requirement for which compliance is being determined. For instance, to determine compliance with the epoxide emission requirement of §63.1425(b), the owner or operator is only required to measure epoxide control efficiency or outlet concentration.

(1) *Sampling site location.* The sampling site location shall be determined as specified in paragraphs (c)(1)(i) and (ii) of this section.

(i) For determination of compliance with a percent reduction of total epoxide requirement in §63.1425(b)(1)(i), (b)(2)(ii), or a percent reduction of total organic HAP requirement in §63.1425(c)(1)(ii), (c)(3)(ii), or (d)(2), sampling sites shall be located at the inlet of the combustion, recovery, or recapture device as specified in paragraphs (c)(1)(i)(A), (B), and (C) of this section, and at the outlet of the combustion, recovery, or recapture device.

(B) For process vents from batch unit operations, the inlet sampling site shall be determined in accordance with either paragraph (c)(1)(i)(B)(*1*) or (*2*) of this section.

(*1*) To demonstrate compliance with either the provisions for epoxide emissions in §63.1425(b) or the provisions for nonepoxide organic HAP emissions from catalyst extraction in §63.1425(d), the inlet sampling site shall be located after the exit from the batch unit operation but before any recovery device.

(*2*) To demonstrate compliance with the requirements for nonepoxide organic HAP emissions in making or modifying the product in §63.1425(c), the inlet sampling site shall be located after all control techniques to reduce epoxide emissions but before any nonepoxide organic HAP recovery device.

(ii) To determine compliance with a parts per million by volume total epoxide or TOC limit in §63.1425(b)(1)(ii) or (b)(2)(iii), the sampling site shall be located at the outlet of

the combustion, recovery, or recapture device.

(3) *Testing conditions and calculation of TOC or total organic HAP concentration.*

(i) Testing conditions shall be as specified in paragraphs (c)(3)(i)(A) through (E) of this section, as appropriate.

(B) Testing of process vents from batch unit operations shall be conducted at absolute worst-case conditions or hypothetical worst-case conditions, as defined in paragraphs (c)(3)(i)(B)(*1*) through (*5*) of this section. Worst-case conditions are limited to the maximum production allowed in a State or Federal permit or regulation and the conditions specified in §63.1437(a)(1). Gas stream volumetric flow rates shall be measured at 15-minute intervals, or at least once during the emission episode. The organic HAP or TOC concentration shall be determined from samples collected in an integrated sample over the duration of the test, or from grab samples collected simultaneously with the flow rate measurements (at approximately equal intervals of about 15 minutes). If an integrated sample is collected for laboratory analysis, the sampling rate shall be adjusted proportionally to reflect variations in flow rate.

(*1*) Absolute worst-case conditions are defined by the criteria presented in paragraph (c)(3)(i)(B)(*1*)(*i*) or (*ii*) of this section if the maximum load is the most challenging condition for the control device. Otherwise, absolute worst-case conditions are defined by the conditions in paragraph (c)(3)(i)(B)(*1*)(*iii*) of this section.

(*i*) The period in which the inlet to the control device will contain at least 50 percent of the maximum HAP load (in lbs) capable of being vented to the control device over any 8-hour period. An emission profile as described in paragraph (c)(3)(i)(B)(*3*)(*i*) of this section shall be used to identify the 8-hour period that includes the maximum projected HAP load.

(*ii*) A period of time in which the inlet to the control device will contain the highest HAP mass loading rate capable of being vented to the control device. An emission profile as described in paragraph (c)(3)(i)(B)(*3*)(*i*) of this section shall be used to identify the period of maximum HAP loading.

(*iii*) The period of time when the HAP loading or stream composition (including non-HAP) is most challenging for the control device. These conditions include, but are not limited to the following: periods when the stream contains the highest combined VOC and HAP load described by the emission profiles in paragraph (c)(3)(i)(B)(*3*) of this section; periods when the streams contain HAP constituents that approach limits of solubility for scrubbing media; or periods when the streams contain HAP constituents that approach limits of adsorptivity for carbon adsorption systems.

(*2*) Hypothetical worst-case conditions are simulated test conditions that, at a minimum, contain the highest hourly HAP load of emissions that would be predicted to be vented to the control device from the emissions profile described in paragraph (c)(3)(i)(B)(*3*)(*ii*) or (*iii*) of this section.

(*3*) The owner or operator shall develop an emission profile for the vent to the control device that describes the characteristics of the vent stream at the inlet to the control device under worst case conditions. The emission profile shall be developed based on any one of the procedures described in paragraphs (c)(3)(i)(B)(*3*) (*i*) through (*iii*) of this section, as required by paragraph (c)(3)(i)(B) of this section.

(*i*) The emission profile shall consider all emission episodes that could contribute to the vent stack for a period of time that is

sufficient to include all processes venting to the stack and shall consider production scheduling. The profile shall describe the HAP load to the device that equals the highest sum of emissions from the episodes that can vent to the control device in any given period, not to exceed 1 hour. Emissions per episode shall be divided by the duration of the episode only if the duration of the episode is longer than 1 hour, and emissions per episode shall be calculated using the procedures specified in Equation 1:

$$E = \sum_{i=1}^{n} P_i MW_i \times \frac{(V)(t)}{(R)(T)} \times \frac{P_T}{P_T - \sum_{j=1}^{m}(P_j)} \qquad [Equation\ 1]$$

Where:
E = Mass of HAP emitted.
V = Purge flow rate at the temperature and pressure of the vessel vapor space.
R = Ideal gas law constant.
T = Temperature of the vessel vapor space (absolute).
P_i = Partial pressure of the individual HAP.
P_j = Partial pressure of individual condensable VOC compounds (including HAP).
P_T = Pressure of the vessel vapor space.
MW_i = Molecular weight of the individual HAP.
t = Time of purge.
n = Number of HAP compounds in the emission stream.
i = Identifier for a HAP compound.
j = Identifier for a condensable compound.
m = Number of condensable compounds (including HAP) in the emission stream.

(*ii*) The emission profile shall consist of emissions that meet or exceed the highest emissions that would be expected under actual processing conditions. The profile shall describe equipment configurations used to generate the emission events, volatility of materials processed in the equipment, and the rationale used to identify and characterize the emission events. The emissions may be based on using compounds more volatile than compounds actually used in the process(es), and the emissions may be generated from all equipment in the process(es) or only selected equipment.

(*iii*) The emission profile shall consider the capture and control system limitations and the highest emissions that can be routed to the control device, based on maximum flow rate and concentrations possible because of limitations on conveyance and control equipment (e.g., fans, LEL alarms and safety bypasses).

(*4*) Three runs, each at a minimum of the complete duration of the batch venting episode or 1 hour, whichever is shorter, and a maximum of 8 hours, are required for performance testing. Each run shall occur over the same worst-case conditions, as defined in paragraph (c)(3)(i)(B) of this section.

(5) If a condenser is used to control the process vent stream(s), the worst case emission episode(s) shall represent a period of time in which a process vent from the batch cycle or combination of cycles (if more than one cycle is vented through the same process vent) will require the maximum heat removal capacity, in Btu/hr, to cool the process vent stream to a temperature that, upon calculation of HAP concentration, will yield the required removal efficiency for the entire cycle. The calculation of maximum heat load shall be based on the emission profile described in paragraph (c)(3)(i)(B)(*3*) of this section that will allow calculation of sensible and latent heat loads.

(ii) The concentration of either TOC (minus methane or ethane) or total organic HAP (of the HAP of concern) shall be calculated according to paragraph (c)(3)(ii)(A) or (B) of this section.

(A) The TOC concentration (CTOC) is the sum of the concentrations of the individual components and shall be computed for each run using Equation 2:

$$C_{TOC} = \sum_{i=1}^{x} \frac{\left(\sum_{j=1}^{n} C_{ji} \right)}{x} \qquad [Equation\ 2]$$

Where:

CTOC = Concentration of TOC (minus methane and ethane), dry basis, parts per million by volume.

C_{ji} = Concentration of sample components j of sample i, dry basis, parts per million by volume.

n = Number of components in the sample.

x = Number of samples in the sample run.

(B) The total organic HAP concentration (CHAP) shall be computed according to Equation 2, except that only the organic HAP species shall be summed.

(4) *Test methods.* When testing is conducted to measure emissions from an affected source, the test methods specified in paragraphs (c)(4)(i) through (iv) of this section shall be used, as applicable.

(i) For sample and velocity traverses, Method 1 or 1A of appendix A of part 60 shall be used, as appropriate, except that references to particulate matter in Method 1A do not apply for the purposes of this subpart.

(ii) The velocity and gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate.

(iii) The concentration measurements shall be determined using the methods described in paragraphs (c)(4)(iii) (A) through (C) of this section.

(A) Method 18 of appendix A of part 60 may be used to determine the HAP concentration in any control device efficiency determination.

(C) Method 25A of appendix A of part 60 may be used to determine the HAP or TOC concentration for control device efficiency determinations under the conditions specified in Method 25 of appendix A of part 60 for direct measurements of an effluent with a flame ionization detector, or in demonstrating compliance with the 20 ppmv standard, the instrument shall be calibrated on methane or the predominant HAP. If calibrating on the predominant HAP, the use of Method 25A of appendix

A of part 60 shall comply with paragraphs (c)(4)(iii)(C) (*1*) through (*3*) of this section.

(*1*) The organic HAP used as the calibration gas for Method 25A of appendix A of part 60 shall be the single organic HAP representing the largest percent by volume.

(*2*) The use of Method 25A, 40 CFR part 60, appendix A, is acceptable if the response from the high level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(*3*) The span value of the analyzer shall be less than 100 ppmv.

(iv) Alternatively, any other method or data that have been validated according to the applicable procedures in 40 CFR part 63, Appendix A, Method 301 may be used.

(5) *Calculation of percent reduction efficiency*. The following procedures shall be used to calculate percent reduction efficiency:

(i) Test duration shall be as specified in paragraphs (c)(3)(i) (A) through (B) of this section, as appropriate.

(ii) The mass rate of either TOC (minus methane and ethane) or total organic HAP of the HAP of concern (E_i, E_o) shall be computed.

(A) The following equations shall be used:

$$E_i = K_2 \left(\sum_{j=1}^{n} C_{ij} M_{ij} \right) Q_i \quad [Equation\ 4]$$

$$E_o = K_2 \left(\sum_{j=1}^{n} C_{oj} M_{oj} \right) Q_o$$

Where:

C_{ij}, C_{oj} = Concentration of sample component j of the gas stream at the inlet and outlet of the combustion, recovery, or recapture device, respectively, dry basis, parts per million by volume.

E_i, E_o = Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet and outlet of the combustion, recovery, or recapture device, respectively, dry basis, kilogram per hour.

M_{ij}, M_{oj} = Molecular weight of sample component j of the gas stream at the inlet and outlet of the combustion, recovery, or recapture device, respectively, gram/gram-mole.

Q_i, Q_o = Flow rate of gas stream at the inlet and outlet of the combustion, recovery, or recapture device, respectively, dry standard cubic meter per minute.

K_2 = Constant, 2.494×10^{-6} (parts per million) $^{-1}$ (gram-mole per standard cubic meter) (kilogram/gram) (minute/hour), where standard temperature (gram-mole per standard cubic meter) is 20 °C.

(B) Where the mass rate of TOC is being calculated, all organic compounds (minus methane and ethane) measured by Method 18 of 40 CFR part 60, Appendix A are summed using Equations 4 and 5 in paragraph (c)(5)(ii)(A) of this section.

(C) Where the mass rate of total organic HAP is being calculated, only the organic

HAP species shall be summed using Equations 4 and 5 in paragraph (c)(5)(ii)(A) of this section.

(iii) The percent reduction in TOC (minus methane and ethane) or total organic HAP shall be calculated using Equation 6 as follows:

$$R = \frac{E_i - E_o}{E_i}(100) \qquad \text{[Equation 6]}$$

Where:

R = Control efficiency of combustion, recovery, or recapture device, percent.
E_i = Mass rate of TOC (minus methane and ethane) or total organic HAP at the inlet to the combustion, recovery, or recapture device as calculated under paragraph (c)(5)(ii) of this section, kilograms TOC per hour or kilograms organic HAP per hour.
E_o = Mass rate of TOC (minus methane and ethane) or total organic HAP at the outlet of the combustion, recovery, or recapture device, as calculated under paragraph (c)(5)(ii) of this section, kilograms TOC per hour or kilograms organic HAP per hour.

(d) *Determination of uncontrolled organic HAP emissions*. For each process vent at a PMPU that is complying with the process vent control requirements in §63.1425(b)(1)(i), (b)(1)(iii), (b)(2)(ii), (b)(2)(iv), (c)(1)(ii), or (d)(2) using a combustion, recovery, or recapture device, the owner or operator shall determine the uncontrolled organic HAP emissions in accordance with the provisions of this paragraph, with the exceptions noted in paragraph (d)(1) of this section. The provisions of §63.1427(c)(1) shall be used to calculate uncontrolled epoxide emissions prior to the onset of an extended cook out.

(1) *Exemptions*. The owner or operator is not required to determine uncontrolled organic HAP emissions for process vents in a PMPU if the conditions in paragraph (d)(1)(i), (ii), or (iii) of this section are met.

(i) For PMPUs where all process vents subject to the epoxide emission reduction requirements of §63.1425(b) are controlled at all times using a combustion, recovery, or recapture device, or extended cookout, the owner or operator is not required to determine uncontrolled epoxide emissions.

(2) *Process vents from batch unit operations*. The uncontrolled organic HAP emissions from an individual batch cycle for each process vent from a batch unit operation shall be determined using the procedures in the NESHAP for Group I Polymers and Resins (40 CFR part 63, subpart U), §63.488(b)(1) through (9). Uncontrolled emissions from process vents from batch unit operations shall be determined after the exit from the batch unit operation but before any recovery device.

(e) *Determination of organic HAP emission reduction for a PMPU*.

(1) The owner or operator shall determine the organic HAP emission reduction for process vents in a PMPU that are complying with §63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), or (d)(2) using Equation 7. The organic HAP emission reduction shall be determined for each group of process vents subject to the same paragraph (i.e., paragraph (b), (c), or (d)) of §63.1425. For instance, process vents that emit epoxides are subject to paragraph (b) of §63.1425. Therefore, if the owner or operator of an existing affected source is complying with the 98 percent reduction requirement in §63.1425(b)(2)(ii), the organic HAP (i.e., epoxide) emission reduction shall be determined for the group of vents in a PMPU that are subject to this paragraph.

$$RED_{PMPU} = \left(\frac{\sum_{i=1}^{n} \left(E_{unc,i} \right) \left(\frac{R_i}{100} \right)}{\sum_{i=1}^{n} \left(E_{unc,i} \right) + \sum_{j=1}^{m} \left(E_{unc,j} \right)} \right) * 100 \qquad [Equation\ 7]$$

Where:

RED_{PMPU} = Organic HAP emission reduction for the group of process vents subject to the same paragraph of §63.1425, percent.

$E_{unc,i}$ = Uncontrolled organic HAP emissions from process vent i that is controlled using a combustion, recovery, or recapture device, or extended cookout, kg/batch cycle for process vents from batch unit operations, kg/hr for process vents from continuous unit operations.

n = Number of process vents in the PMPU that are subject to the same paragraph of §63.1425 and that are controlled using a combustion, recovery, or recapture device, or extended cookout.

R_i = Control efficiency of the combustion, recovery, or recapture device, or extended cookout, used to control organic HAP emissions from vent i, determined in accordance with paragraph (e)(2) of this section.

$E_{unc,j}$ = Uncontrolled organic HAP emissions from process vent j that is not controlled using a combustion, recovery, or recapture device, kg/batch cycle for process vents from batch unit operations, kg/hr for process vents from continuous unit operations.

m = Number of process vents in the PMPU that are subject to the same paragraph of §63.1425 and that are not controlled using a combustion, recovery, or recapture device.

(2) The control efficiency, Ri, shall be assigned as specified below in paragraph (e)(2)(i), (ii), (iii), or (iv) of this section.

(ii) If the process vent is controlled using a combustion, recovery, or recapture device for which a performance test has been conducted in accordance with the provisions of paragraph (c) of this section, or for which a performance test that meets the requirements of paragraph (b)(3) of this section has been previously performed, the control efficiency shall be the efficiency determined by the performance test.

(f) *Design evaluation*. A design evaluation is required for those control techniques that receive less than 10 tons per year (9.1 megagrams per year) of uncontrolled organic HAP emissions from one or more PMPU, if the owner or operator has chosen not to conduct a performance test for those control techniques in accordance with paragraph (b)(6) of this section. The design evaluation shall include documentation demonstrating that the control technique being used achieves the required control efficiency under worst-case conditions, as determined from the emission profile described in §63.1426(c)(3)(i)(B)(*3*)(*i*).

(1) Except for ECO whose design evaluation is presented in paragraph (f)(2) of this section, to demonstrate that a control technique meets the required control efficiency, a design evaluation shall address the composition and organic HAP concentration of the vent stream, immediately preceding the use of the control technique. A design evaluation shall also address other vent stream characteristics and control technique operating parameters, as specified in any one of paragraphs (f)(1)(i) through (vi) of this section, depending on the type of control technique that is used. If the vent stream is not the only inlet to the control technique, the owner or operator shall also account for all other vapors, gases, and liquids, other than fuels, received into the control technique from one or more PMPUs, for purposes of the efficiency determination.

(iii) For a condenser, in the design evaluation the owner or operator shall consider the vent stream flow rate, relative humidity, and temperature, and shall establish the design outlet organic HAP compound concentration level, design average temperature of the exhaust

vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet. The temperature of the gas stream exiting the condenser shall be measured and used to establish the outlet organic HAP concentration.

(v) For a carbon adsorption system that does not regenerate the carbon bed directly onsite as part of the control technique (such as a carbon canister), in the design evaluation the owner or operator shall consider the vent stream mass or volumetric flow rate, relative humidity, and temperature, and shall establish the design exhaust vent stream organic compound concentration level, capacity of the carbon bed, type and working capacity of activated carbon used for the carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control technique and source operating schedule.

(vi) For a scrubber, in the design evaluation the owner or operator shall consider the vent stream composition, constituent concentrations, liquid-to-vapor ratio, scrubbing liquid flow rate and concentration, temperature, and the reaction kinetics of the constituents with the scrubbing liquid. The design evaluation shall establish the design exhaust vent stream organic compound concentration level and shall include the additional information in paragraphs (f)(1)(vi) (A) and (B) of this section for trays and a packed column scrubber.

(A) Type and total number of theoretical and actual trays.

(B) Type and total surface area of packing for entire column and for individual packed sections, if the column contains more than one packed section.

(2) For ECO, the design evaluation shall establish the minimum duration (time) of the ECO, the maximum pressure at the end of the ECO, or the maximum epoxide concentration in the reactor liquid at the end of the ECO for each product class.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40CFR§63.1426]

8.3.2. Additional requirements for performance testing.

(a) Performance testing shall be conducted in accordance with §63.7(a)(1), (a)(3), (d), (e)(1), (e)(2), (e)(4), (g), and (h), with the exceptions specified in paragraphs (a)(1) through (4) of this section and the additions specified in paragraph (b) of this section.

(1) Performance tests shall be conducted according to the general provisions' performance testing requirements in §63.7(e)(1) and (2), except that for all emission sources except process vents from batch unit operations, performance tests shall be conducted during maximum representative operating conditions for the process achievable during one of the time periods described in paragraph (a)(1)(i) of this section, without causing any of the situations described in paragraph (a)(1)(ii) or (iii) of this section to occur. For process vents from batch unit operations, performance tests shall be conducted either at absolute worst-case conditions or hypothetical worst-case conditions, as defined in §63.1426(c)(3)(i)(B), that are achievable during one of the time periods described in paragraph (a)(1)(i) of this section, without causing any of the situations described in paragraph (a)(1)(ii) or (iii) of this section to occur.

(i) The 6-month period that ends 2 months before the Notification of Compliance Status is due, according to §63.1439(e)(5); or the 6-month period that begins 3 months before the performance test and ends 3 months after the performance test.

(ii) Causing damage to equipment; necessitating that the owner or operator make a product that does not meet an existing specification for sale to a customer; or necessitating that the owner or operator make a product in excess of demand.

(iii) Causing plant or testing personnel to be subject to unsafe conditions. Owners or operators that limit testing based on this paragraph shall maintain documentation that demonstrates the nature of the unsafe conditions and explains measures considered by the owner or operator to overcome these conditions. If requested, this documentation shall be provided to the Administrator.

(2) When the General Provisions' data analysis, recordkeeping, and reporting requirements in §63.7(g) refer to the Notification of Compliance Status requirements in §63.9(h), the Notification of Compliance Status requirements in §63.1439(e)(5) shall instead apply, for the purposes of this subpart.

(3) Because the General Provisions' site-specific test plan in §63.7(c)(3) is not required, the General Provisions' requirement for the Administrator to approve or deny site-specific test plans, in §63.7(h)(4)(ii), is not applicable for the purposes of this subpart.

(4) The owner or operator of an affected source shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected source shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled test date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

(b) Data shall be reduced in accordance with the EPA approved methods specified in the applicable subpart or, if other test methods are used, the data and methods shall be validated according to the protocol in Method 301, 40 CFR part 63, appendix A.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40 C.F.R. §63.1437]

8.3.3. Parameter monitoring levels and excursions.

(a) *Establishment of parameter monitoring levels*. The owner or operator of a combustion, recovery, or recapture device that has one or more parameter monitoring level requirements specified under this subpart shall establish a maximum or minimum level for each measured parameter. If a performance test is required by this subpart for a combustion, recovery, or recapture device, the owner or operator shall use the procedures in either paragraph (b) or (c) of this section to establish the parameter monitoring level(s). If a performance test is not required by this subpart for a combustion, recovery, or recapture device, the owner or operator may use the procedures in paragraph (b), (c), or (d) of this section to establish the parameter monitoring levels. When using the procedures specified in paragraph (c) or (d) of this section, the owner or operator shall submit the information specified in §63.1439(e)(4)(viii) for review and approval, as part of the Precompliance Report.

(1) The owner or operator shall operate combustion, recovery, and recapture devices such that the daily average value of monitored parameters remains at or above the minimum established level, or remains at or below the maximum established level, except as otherwise provided in this subpart.

(2) As specified in §63.1439(e)(5)(ii), all established levels, along with their supporting documentation and the definition of an operating day, shall be submitted as part of the Notification of Compliance Status.

(3) Nothing in this section shall be construed to allow a monitoring parameter excursion caused by an activity that violates other applicable provisions of 40 CFR part 63, subparts A, F, G, or H.

(b) *Establishment of parameter monitoring levels based exclusively on performance tests*. In cases where a performance test is required by this subpart, or the owner or operator of the affected source elects to do a performance test in accordance with the provisions of this subpart, and an owner or operator elects to establish a parameter monitoring level for a combustion, recovery, or recapture device based exclusively on parameter values measured during the performance test, the owner or operator of the affected source shall comply with the procedures in paragraph (b)(1) or (2) of this section, as applicable.

(2) *Process vents from batch unit operations*. For process vents from batch unit operations, during initial compliance testing, the appropriate parameter shall be monitored continuously during the entire test period. The monitoring level(s) shall be those established during from the compliance test.

(c) *Establishment of parameter monitoring levels based on performance tests, supplemented by engineering assessments and/or manufacturer's recommendations*. Parameter monitoring levels established under this paragraph shall be based on the parameter values measured during the performance test supplemented by engineering assessments and/or manufacturer's recommendations. Performance testing is not required to be conducted over the entire range of expected parameter values. The information specified in paragraphs (c)(1) and (2) of this section shall be provided in the Notification of Compliance Status.

(1) The specific level of the monitored parameter(s) for each emission point.

(2) The rationale for the specific level for each parameter for each emission point, including any data and calculations used to develop the level and a description of why the level indicates proper operation of the combustion, recovery, or recapture device.

(d) *Establishment of parameter monitoring based on engineering assessments and/or manufacturer's recommendations*. If a performance test is not required by this subpart for a combustion, recovery, or recapture device, the maximum or minimum level may be based solely on engineering assessments and/or manufacturers' recommendations. As required in paragraph (a)(2) of this section, the determined level and all supporting documentation shall be provided in the Notification of Compliance Status.

(e) *Monitoring violations.*

(1) With the exception of excursions excused in accordance with paragraph (g) of this section, each excursion, as defined in paragraphs (f)(1)(i), (f)(2)(i)(A), (f)(2)(ii), (f)(3)(i), and (f)(4) of this section, constitutes a violation of the provisions of this subpart in accordance with paragraph (e)(1)(i), (ii), or (iii) of this section.

(i) For each condenser, each excursion constitutes a violation of the emission limit.

(ii) For each recovery or recapture device other than a condenser, where an organic monitoring device is used to monitor concentration, each excursion constitutes a violation of the emission limit.

(iii) For each combustion, recovery, or recapture device other than a condenser, each excursion constitutes a violation of the operating limit.

(2) With the exception of excursions excused in accordance with paragraph (g) of this section, each excursion, as defined in paragraphs (f)(1)(ii), (f)(1)(iii), (f)(2)(i)(B), and (f)(3)(ii) of this section constitutes a violation of the operating limit.

(f) *Parameter monitoring excursion definitions*. Parameter monitoring excursions are defined in paragraphs (f)(1) through (3) of this section.

(1) With respect to storage vessels (where the applicable monitoring plan specifies continuous monitoring), process vents from continuous unit operations using combustion, recovery, or recapture devices for purposes of compliance, and for process wastewater streams, an excursion means any of the three cases listed in paragraphs (f)(1)(i) through (iii) of this section.

(i) The daily average value of one or more monitored parameters is above the maximum level or below the minimum level established for the given parameters.

(ii) The period of combustion, recovery, or recapture device operation, with the exception noted in paragraph (f)(1)(v) of this section, is 4 hours or greater in an operating day and monitoring data are insufficient, as defined in paragraph (f)(1)(iv) of this section, to constitute a valid hour of data for at least 75 percent of the operating hours.

(iii) The period of combustion, recovery, or recapture device operation, with the exception noted in paragraph (f)(1)(v) of this section, is less than 4 hours in an operating day and more than 2 of the hours during the period of operation do not constitute a valid hour of data due to insufficient monitoring data, as defined in paragraph (f)(1)(iv) of this section.

(iv) Monitoring data are insufficient to constitute a valid hour of data, as used in paragraphs (f)(1)(ii) and (iii) of this section, if measured values are unavailable due to monitoring system breakdowns, repairs, calibrated checks, or zero (low-level) and high level adjustments, for any of the 15-minute periods within the hour. For data compression systems approved under §63.1439(g)(3), monitoring data are insufficient to calculate a valid hour of data if there are less than four data measurements made during the hour.

(v) The periods listed in paragraphs (f)(1)(v)(A) through (D) of this section are not considered to be part of the period of combustion, recovery, or recapture device operation, for the purposes of paragraphs (f)(1)(ii) and (iii) of this section.

(A) Start-ups;

(B) Shutdowns;

(C) Malfunctions; or

(D) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(2) For storage vessels where the applicable monitoring plan does not specify continuous monitoring, an excursion is defined in paragraph (f)(2)(i) or (ii) of this section, as applicable.

(i) If the monitoring plan specifies monitoring a parameter and recording its value at specific intervals (such as every 15 minutes or every hour), either of the cases listed in paragraph (f)(2)(i)(A) or (B) of this section is considered a single excursion for the combustion device.

(A) When the average value of one or more parameters, averaged over the time during which the storage vessel is being filled (i.e., when the liquid level in the storage vessel is being raised), is above the maximum level or below the minimum level established for the given parameters.

(B) When monitoring data are insufficient. Monitoring data shall be considered insufficient when measured values are not available, due to monitoring system breakdowns, repairs, calibration checks, or zero (low-level) and high-level adjustments, for at least 75 percent of the specific intervals at which parameters are to be monitored and recorded, according to the storage vessel's monitoring plan, during which the storage vessel is being filled.

(ii) If the monitoring plan does not specify monitoring a parameter and recording its value at specific intervals (for example, if the relevant operating requirement is to exchange a disposable carbon canister before expiration of its rated service life), the monitoring plan shall define an excursion in terms of the relevant operating requirement.

(3) With respect to process vents from batch unit operations, an excursion means one of the two cases listed in paragraphs (f)(3)(i) and (ii) of this section.

(i) When the daily average value of one or more monitored parameters is above the maximum or below the minimum established level for the given parameters.

(ii) When monitoring data are insufficient for an operating day. Monitoring data shall be considered insufficient when measured values are not available, due to monitoring system breakdowns, repairs, calibration checks, or zero (low-level) and high-level adjustments, for at least 75 percent of the 15-minute periods when batch emission episodes selected to be controlled are being vented to the control device during the operating day, using the procedures specified in paragraphs (f)(3)(ii)(A) through (D) of this section.

(A) Determine the total amount of time during the operating day when batch emission episodes selected to be controlled are being vented to the control device.

(B) Subtract the time during the periods listed in paragraphs (f)(3)(ii)(B)(*1*) through (*4*) of this section from the total amount of time determined above in paragraph (f)(3)(ii)(A) of this section, to obtain the operating time used to determine if monitoring data are insufficient.

(*1*) Start-ups;

(*2*) Shutdowns;

(*3*) Malfunctions; or

(*4*) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(C) Determine the total number of 15-minute periods in the operating time used to determine if monitoring data are insufficient, as was determined in accordance with paragraph (f)(3)(ii)(B) of this section.

(D) If measured values are not available for at least 75 percent of the total number of 15-minute periods determined in paragraph (f)(3)(ii)(C) of this section, the monitoring data are insufficient for the operating day.

(4) With respect to process vents using ECO to reduce epoxide emissions, an excursion means any of the situations described in §63.1427(i)(3)(i) through (v). For each excursion, the owner or operator shall be deemed out of compliance with the provisions of this subpart, in accordance with paragraph (e) of this section, except as provided in paragraph (g) of this section.

(g) *Excused excursions*. A number of excused excursions shall be allowed for each combustion, recovery, or recapture device for each semiannual period. The number of excused excursions for each semiannual period is specified in paragraphs (g)(1) through (6) of this section. This paragraph applies to affected sources required to submit Periodic Reports semiannually or quarterly. The first semiannual period is the 6-month period starting the date the Notification of Compliance Status is due.

(1) For the first semiannual period -- six excused excursions.
(2) For the second semiannual period -- five excused excursions.
(3) For the third semiannual period -- four excused excursions.
(4) For the fourth semiannual period -- three excused excursions.
(5) For the fifth semiannual period -- two excused excursions.
(6) For the sixth and all subsequent semiannual periods -- one excused excursion.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40 C.F.R. §63.1438]

8.4. Recordkeeping Requirements

8.4.1. The permittee shall keep and maintain on site, for a period of not less than five (5) years, accurate records of throughput for all storage tanks listed in 8.1.3. and 8.1.4. on a monthly and twelve (12) rolling month total basis. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.
[45CSR13, Permit No. R13-2443 -(Condition B.2.)]

8.4.2. The permittee shall keep and maintain on site, for a period of not less than five (5) years, accurate records of throughput for all loading areas listed in 8.1.5 on a monthly and twelve (12) rolling month total basis. Certified copies of these records shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.
[45CSR13, Permit No. R13-2443 -(Condition B.3.)]

8.4.3. Process vent reporting and record keeping requirements.

(b) *Records to demonstrate compliance*. The owner or operator complying with the process vent control requirements in §63.1425(b), (c), or (d) shall keep the following records, as applicable, readily accessible:

(2) The following information when using a combustion, recovery, or recapture device (other than a flare) to achieve compliance with the process vent control requirements in §63.1425(b), (c), or (d):

(i) For a combustion, recovery, or recapture device being used to comply with a percent reduction requirement of §63.1425(b)(1)(i), (b)(2)(ii), (c)(1)(ii), (c)(3)(ii), or (d)(2) , or the annual epoxide emission limitation in §63.1425(b)(1)(iii) or (b)(2)(iv), the percent reduction of organic HAP or TOC achieved, as determined using the procedures specified in the process vent requirements in §63.1426;

(ii) For a combustion device being used to comply with an outlet concentration limitation of §63.1425(b)(1)(ii) or (b)(2)(iii), the concentration of organic HAP or TOC outlet of the combustion device, as determined using the procedures specified in the process vent requirements in §63.1426;

(c) *Records related to the establishment of parameter monitoring levels*. For each parameter monitored according to the process vent monitoring requirements in §63.1429(a) and Table 5 of this subpart, or

for alternate parameters and/or parameters for alternate control techniques monitored according to the alternative parameter monitoring reporting requirements in §63.1429(b), maintain documentation showing the establishment of the level that indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart, as required by the process vent monitoring requirements in §63.1429(d).

(d) *Records to demonstrate continuous compliance*. The owner or operator that uses a combustion, recovery, or recapture device to comply with the process vent control requirements in §63.1425(b), (c), or (d) shall keep the following records readily accessible:

(1) Continuous records of the equipment operating parameters specified to be monitored under the process vent monitoring requirements in §63.1429(a) as applicable, and listed in Table 5 of this subpart, or specified by the Administrator in accordance with the alternative parameter monitoring requirements in §63.1439(f), as allowed under §63.1429(b). These records shall be kept as specified under §63.1439(d), except as specified in paragraphs (d)(1)(i) and (ii) of this section.

(2) Records of the daily average value for process vents from continuous or batch unit operations of each continuously monitored parameter, except as provided in paragraphs (d)(2)(i) and (ii) of this section.

(i) Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in computing the daily averages. In addition, monitoring data recorded during periods of non-operation of the process (or specific portion thereof) resulting in cessation of organic HAP emissions, (or periods of start-up, shutdown, or malfunction) shall not be included in computing the daily averages.

(ii) If all recorded values for a monitored parameter during an operating day are above the minimum or below the maximum parameter monitoring level established in accordance with the process vent monitoring requirements in §63.1429(d), the owner or operator may record that all values were above the minimum or below the maximum level established, rather than calculating and recording a daily average for that operating day.

(3) Hourly records of whether the flow indicator for bypass lines specified under §63.1429(c)(1) was operating and whether a diversion was detected at any time during the hour. Also, records of the time(s) of all periods when the process vent was diverted from the combustion, recovery, or recapture device, or the flow indicator specified in §63.1429(c)(1) was not operating.

(4) Where a seal or closure mechanism is used to comply with the process vent monitoring requirements for bypass lines in §63.1429(c)(2), hourly records of flow are not required. For compliance with §63.1429(c)(2), the owner or operator shall record whether the monthly visual inspection of the seals or closure mechanism has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has been changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal has been broken.

(5) Records specifying the times and duration of periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments. In addition, records specifying any other periods of process or combustion, recovery, or recapture device operation when monitors are not operating.

(g) *Notification of Compliance Status*. The owner or operator of an affected source shall submit the information specified in paragraphs (g)(1) through (3) of this section, as appropriate, as part of the Notification of Compliance Status specified in §63.1439(e)(5).

(1) For the owner or operator complying with the process vent control requirements in §63.1425(b), (c)(1), (c)(3), or (d), the information specified in paragraph (b) of this section related to the compliance demonstration, and the information specified in paragraph (c) of this section related to the establishment of parameter monitoring levels.

(h) *Periodic Reports*. The owner or operator of an affected source shall submit Periodic Reports of the recorded information specified in paragraphs (h)(1) through (6) of this section, as appropriate, according to the schedule for submitting Periodic Reports in §63.1439(e)(6)(i).

(1) Reports of daily average values of monitored parameters for all operating days when the daily average values recorded under paragraph (d)(2) of this section were above the maximum, or below the minimum, level established in the Notification of Compliance Status or operating permit.

(2) Reports of the duration of periods when monitoring data are not collected for each excursion caused by insufficient monitoring data as defined in §63.1438(f)(1)(iv), (f)(2)(i)(B), or (f)(3)(ii).

(3) Reports of the times and durations of all periods recorded under paragraph (d)(3) of this section when the process vent stream is diverted from the combustion, recovery, or recapture device through a bypass line.

(4) Reports of all periods recorded under paragraph (d)(4) of this section in which the seal mechanism is broken, the bypass line valve position has changed, or the key to unlock the bypass line valve was checked out.

(k) *Alternative requests.* If an owner or operator uses a combustion, recovery, or recapture device other than those specified in the process vent monitoring requirements in §63.1429(a)(1) through (7) and listed in Table 5 of this subpart; requests approval to monitor a parameter other than those specified in §63.1429(a)(1) through (7) and listed in Table 5 of this subpart; or uses ECO and requests to monitor a parameter other than those listed in §63.1427(i)(1)(iv), the owner or operator shall submit a description of planned reporting and record keeping procedures, as specified in §63.1439(f)(3), as part of the Precompliance Report as required under §63.1439(e)(4), or to the Administrator as a separate submittal. The Administrator will specify appropriate reporting and record keeping requirements as part of the review of the Precompliance Report

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40CFR§63.1430]

8.4.4. General recordkeeping and reporting provisions.

(a) *Data retention*. Unless otherwise specified in this subpart, the owner or operator of an affected source shall keep copies of all applicable records and reports required by this subpart for at least 5 years. All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 6 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provide access within 2 hours after a request. The remaining 4 and one-half years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form including, but not limited to, on microfilm, computer, floppy disk, magnetic tape, or microfiche. If an owner or operator submits copies of reports to the applicable EPA Regional Office, the owner or operator is not required to maintain copies of reports. If the EPA Regional Office has waived the requirement of §63.10(a)(4)(ii) for submittal of copies of reports, the owner or operator is not required to maintain copies of reports.

(b) *Subpart A requirements*. The owner or operator of an affected source shall comply with the applicable recordkeeping and reporting requirements in 40 CFR part 63, subpart A (the General Provisions) as specified in Table 1 of this subpart. These requirements include, but are not limited to, the requirements specified in paragraphs (b)(1) and (2) of this section.

(1) *Start-up, shutdown, and malfunction plan*. The owner or operator of an affected source shall develop and implement a written start-up, shutdown, and malfunction plan as specified in the General Provisions' requirements for a Startup, Shutdown, and Malfunction Plan in §63.6(e)(3). This plan shall describe, in detail, procedures for operating and maintaining the affected source during periods of start-up, shutdown, and malfunction and a program for corrective action for malfunctioning process and air pollution control equipment used to comply with this subpart. A provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of this subpart may be included in the start-up, shutdown, and malfunction plan only if the owner or operator has demonstrated to the Administrator, through the Precompliance Report or a supplement to the Precompliance Report, that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. The owner or operator of the affected source shall keep the

start-up, shutdown, and malfunction plan on site. In addition, if the start-up, shutdown, and malfunction plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the start-up, shutdown, and malfunction plan for a period of 5 years after each revision to the plan. If the new version of the start-up, shutdown, and malfunction plan includes a provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required, the owner or operator shall submit a supplement to the Precompliance Report to the Administrator for the Administrator's approval, documenting that the monitoring system would be damaged or destroyed if it were not shut down during the start-up, shutdown, or malfunction. Records associated with the plan shall be kept as specified in paragraphs (b)(1)(i)(A) and (B) of this section. Reports related to the plan shall be submitted as specified in paragraph (b)(1)(ii) of this section.

(i) The owner or operator shall keep the records specified in paragraphs (b)(1)(i)(A) and (B) of this section.

(A) Records of the occurrence and duration of each start-up, shutdown, and malfunction of operation of process equipment or combustion, recovery, or recapture devices or continuous monitoring systems used to comply with this subpart during which excess emissions (as defined in §63.1420(h)(4)) occur.

(B) For each start-up, shutdown, or malfunction during which excess emissions (as defined in §63.1420(h)(4)) occur, records reflecting whether the procedures specified in the affected source's start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. For example, if a start-up, shutdown, and malfunction plan includes procedures for routing a combustion, recovery, or recapture device to a backup combustion, recovery, or recapture device, records shall be kept of whether the plan was followed. These records may take the form of a “checklist,” or other form of recordkeeping that confirms conformance with the start-up, shutdown, and malfunction plan for the event.

(ii) *Reports of start-up, shutdown, and malfunction*. For the purposes of this subpart, the semiannual start-up, shutdown, and malfunction reports shall be submitted on the same schedule as the Periodic Reports required under paragraph (e)(6) of this section instead of according to the general provisions' Periodic Reporting schedule specified in §63.10(d)(5)(i). The reports shall include the information specified in §63.10(d)(5)(i).

(2) *Application for approval of construction or reconstruction*. For new affected sources, the owner or operator shall comply with the General Provisions' requirements for the application for approval of construction or reconstruction, as specified in §63.5, excluding the provisions specified in §63.5(d)(1)(ii)(H), (d)(1)(iii), (d)(2), and (d)(3)(ii).

(c) *Subpart H requirements*. The owner or operator of an affected source shall comply with the HON equipment leak reporting and recordkeeping requirements in 40 CFR part 63, subpart H, except as specified in §63.1434(b) through (g).

(d) *Recordkeeping and documentation*. The owner or operator required to keep continuous records shall keep records as specified in paragraphs (d)(1) through (7) of this section, unless an alternative recordkeeping system has been requested and approved as specified in paragraph (g) of this section, and except as provided in paragraph (h) of this section. If a monitoring plan for storage vessels pursuant to §63.1432(i) requires continuous records, the monitoring plan shall specify which provisions, if any, of paragraphs (d)(1) through (7) of this section apply. As described in §63.1432(i), certain storage vessels are not required to keep continuous records as specified in this paragraph. The owner or operator of such storage vessels shall keep records as specified in the monitoring plan required by §63.1432(i).

(1) The monitoring system shall measure data values at least once during approximately equal 15-minute intervals.

(2) The owner or operator shall record either each measured data value or block average values for 1 hour or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used

to calculate the hourly (or shorter period) block average instead of all measured values. The owner or operator of process vents from batch unit operations shall record each measured data value.

(3) Daily average values of each continuously monitored parameter shall be calculated for each operating day as specified in paragraphs (d)(3)(i) through (ii) of this section, except as specified in paragraphs (d)(6) and (7) of this section.

(i) The daily average value shall be calculated as the average of all parameter values recorded during the operating day, except as specified in paragraph (d)(7) of this section. The calculated average shall cover a 24-hour period if operation is continuous. If intermittent emissions episodes occur resulting in emissions being vented to a combustion, recapture, or recovery device for a period of less than 24 hours in the operating day, the daily average shall be calculated based only on the period when emissions are being vented to the combustion, recapture, or recovery device. For example, if a batch unit operation operates such that emissions are vented to a combustion device for 6 hours, then the daily average is the average of the temperature measurements taken during those 6 hours.

(ii) The operating day shall be the 24-hour period that the owner or operator specifies in the operating permit or the Notification of Compliance Status, for purposes of determining daily average values.

(6) If all recorded values for a monitored parameter during an operating day are above the minimum level or below the maximum level established in the Notification of Compliance Status or operating permit, the owner or operator may record that all values were above the minimum level or below the maximum level rather than calculating and recording a daily average for that operating day.

(7) Monitoring data recorded during periods identified in paragraphs (d)(7)(i) through (v) of this section shall not be included in any average computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or combustion, recovery, or recapture device operation when monitors are not operating.

(i) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;

(ii) Start-ups;

(iii) Shutdowns;

(iv) Malfunctions; or

(v) Periods of non-operation of the affected source (or portion thereof), resulting in cessation of the emissions to which the monitoring applies.

(8) For continuous monitoring systems used to comply with this subpart, records documenting the completion of calibration checks, and records documenting the maintenance of continuous monitoring systems that are specified in the manufacturer's instructions or that are specified in other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(9) The owner or operator of an affected source granted a waiver of recordkeeping or reporting requirements under the General Provisions' recordkeeping and reporting requirements in §63.10(f) shall maintain the information, if any, specified by the Administrator as a condition of the waiver of recordkeeping or reporting requirements.

(e) *Reporting and notification*. In addition to the reports and notifications required by 40 CFR part 63, subpart A, as specified in this subpart, the owner or operator of an affected source shall prepare and submit the reports listed in paragraphs (e)(3) through (8) of this section, as applicable. All reports required by this subpart, and the schedule for their submittal, are listed in Table 8 of this subpart.

(1) *Violation of reporting requirements*. Owners and operators shall not be in violation of the reporting requirements of this paragraph (e) for failing to submit information required to be included in a specified report if the owner or operator meets the requirements in paragraphs (e)(1)(i) through (iii) of this section. Examples of circumstances where this paragraph may apply include information related to newly-added equipment or emission points, changes in the

process, changes in equipment required or utilized for compliance with the requirements of this subpart, or changes in methods or equipment for monitoring, recordkeeping, or reporting.

(i) The information was not known in time for inclusion in the report specified by this subpart.

(ii) The owner or operator has been diligent in obtaining the information.

(iii) The owner or operator submits a report according to the provisions of paragraphs (e)(1)(iii)(A) through (C) of this section.

(A) If this subpart expressly provides for supplements to the report in which the information is required, the owner or operator shall submit the information as a supplement to that report. The information shall be submitted no later than 60 days after it is obtained, unless otherwise specified in this subpart.

(B) If this subpart does not expressly provide for supplements, but the owner or operator must submit a request for revision of an operating permit pursuant to the State operating permit programs in part 70 or the Federal operating permit programs in part 71, due to circumstances to which the information pertains, the owner or operator shall submit the information with the request for revision to the operating permit.

(C) In any case not addressed by paragraph (e)(1)(iii)(A) or (B) of this section, the owner or operator shall submit the information with the first Periodic Report, as required by this subpart, which has a submission deadline at least 60 days after the information is obtained.

(2) *Submittal of reports*. All reports required under this subpart shall be sent to the Administrator at the applicable address listed in the General Provisions' list of addresses of State air pollution control agencies and EPA Regional Offices, in §63.13. If acceptable to both the Administrator and the owner or operator of a source, reports may be submitted on electronic media.

(4) *Precompliance Report*. The owner or operator of an affected source requesting an extension for compliance; requesting approval to use alternative monitoring parameters, alternative continuous monitoring and recordkeeping, or alternative controls; requesting approval to incorporate a provision for ceasing to collect monitoring data, during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, as permitted under §63.1420(h)(3); or requesting approval to establish parameter monitoring levels according to the procedures contained in §63.1438(c) or (d) shall submit a Precompliance Report according to the schedule described in paragraph (e)(4)(i) of this section. The Precompliance Report shall contain the information specified in paragraphs (e)(4)(ii) through (viii) of this section, as appropriate.

(i) The Precompliance Report shall be submitted to the Administrator no later than 12 months prior to the compliance date. Unless the Administrator objects to a request submitted in the Precompliance Report within 45 days after its receipt, the request shall be deemed approved. For new affected sources, the Precompliance Report shall be submitted to the Administrator with the application for approval of construction or reconstruction required in paragraph (b)(2) of this section. Supplements to the Precompliance Report may be submitted as specified in paragraph (e)(4)(vii) of this section.

(ii) A request for an extension for compliance, as specified in §63.1422(e), may be submitted in the Precompliance Report. The request for a compliance extension shall include the data outlined in the General Provisions' compliance requirements in §63.6(i)(6)(i)(A), (B), and (D), as required in §63.1422(e)(1).

(iii) The alternative monitoring parameter information required in paragraph (f) of this section shall be submitted in the Precompliance Report if, for any emission point, the owner or operator of an affected source seeks to comply through the use of a control technique other than those for which monitoring parameters are specified in this subpart or in 40 CFR part 63, subpart G, or seeks to comply by monitoring a different parameter

than those specified in this subpart or in 40 CFR part 63, subpart G.

(iv) If the affected source seeks to comply using alternative continuous monitoring and recordkeeping as specified in paragraph (g) of this section, the owner or operator shall submit a request for approval in the Precompliance Report.

(v) The owner or operator shall report the intent to use alternative controls to comply with the provisions of this subpart in the Precompliance Report. The Administrator may deem alternative controls to be equivalent to the controls required by the standard, under the procedures outlined in the General Provisions' requirements for use of an alternative nonopacity emission standard, in §63.6(g).

(vi) If the owner or operator is requesting approval to incorporate a provision for ceasing to collect monitoring data, during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, the information specified in paragraphs (e)(4)(vi)(A) and (B) of this section shall be supplied in the Precompliance Report or in a supplement to the Precompliance Report. The Administrator shall evaluate the supporting documentation and shall approve the request only if, in the Administrator's judgment, the specific monitoring equipment would be damaged by the contemporaneous start-up, shutdown, or malfunction.

(A) Documentation supporting a claim that the monitoring equipment would be damaged by the contemporaneous start-up, shutdown, or malfunction; and

(B) A request to incorporate such a provision for ceasing to collect monitoring data during a start-up, shutdown, or malfunction, into the start-up, shutdown, and malfunction plan.

(vii) Supplements to the Precompliance Report may be submitted as specified in paragraph (e)(4)(vii)(A) of this section, or as specified in paragraph (e)(4)(vii)(B) of this section. Unless the Administrator objects to a request submitted in a supplement to the Precompliance Report within 45 days after its receipt, the request shall be deemed approved.

(A) Supplements to the Precompliance Report may be submitted to clarify or modify information previously submitted.

(B) Supplements to the Precompliance Report may be submitted to request approval to use alternative monitoring parameters, as specified in paragraph (e)(4)(iii) of this section; to use alternative continuous monitoring and recordkeeping, as specified in paragraph (e)(4)(iv) of this section; to use alternative controls, as specified in paragraph (e)(4)(v) of this section; or to include a provision for ceasing to collect monitoring data during a start-up, shutdown, or malfunction, in the start-up, shutdown, and malfunction plan, when that monitoring equipment would be damaged if it did not cease to collect monitoring data, as specified in paragraph (e)(4)(vi) of this section.

(viii) If an owner or operator establishes parameter monitoring levels according to the procedures contained in the parameter monitoring provisions in §63.1438(c) or (d), the following information shall be submitted in the Precompliance Report:

(A) Identification of which procedures (i.e., §63.1438(c) or (d)) are to be used; and

(B) A description of how the parameter monitoring level is to be established. If the procedures in §63.1438(c) are to be used, a description of how performance test data will be used shall be included.

(5) *Notification of Compliance Status*. For existing and new affected sources, a Notification of Compliance Status shall be submitted within 150 days after the compliance dates specified in §63.1422. For equipment leaks subject to §63.1434, the owner or operator shall submit the information specified in the HON equipment leak Notification of Compliance Status requirements in §63.182(c), in the Notification of Compliance Status required by this paragraph. For all other emission points, including heat exchange systems, the Notification of Compliance Status shall contain the information listed in paragraphs (e)(5)(i) through (vii) of

this section.

(i) The results of any emission point group determinations, process section applicability determinations, performance tests, inspections, continuous monitoring system performance evaluations, any other information required by the test method to be in the test report used to demonstrate compliance, values of monitored parameters established during performance tests, and any other information required to be included in a Notification of Compliance Status under the requirements for overlapping regulations in §63.1422(j), the HON storage vessel reporting provisions in §63.122 and the storage vessel provisions in §63.1432, and the HON process wastewater reporting provisions in §63.146. In addition, the owner or operator shall comply with paragraphs (e)(5)(i)(A) and (B) of this section.

(A) For performance tests, group determinations, or determination that controls are needed, the Notification of Compliance Status shall include one complete test report, as described in paragraph (e)(5)(i)(B) of this section, for each test method used for a particular kind of emission point. For additional tests performed for the same kind of emission point using the same method, the results and any other information required by the test method to be in the test report shall be submitted, but a complete test report is not required.

(B) A complete test report shall include a brief process description, sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards (if the owner or operator prepares the standards), record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method to be in the test report.

(ii) For each monitored parameter for which a maximum or minimum level is required to be established under the HON process vent monitoring requirements in §63.114(e) and the process vent monitoring requirements in §63.1429(d), the HON process wastewater parameter monitoring requirements in §63.143(f), paragraph (e)(8) of this section, or paragraph (f) of this section, the information specified in paragraphs (e)(5)(ii)(A) through (C) of this section shall be submitted. Further, as described in the storage vessel provisions in §63.1432(k), for those storage vessels for which the parameter monitoring plan (required to be submitted under the HON Notification of Compliance Status requirements for storage vessels in §63.120(d)(3)) specifies compliance with the parameter monitoring provisions of §63.1438, the owner or operator shall provide the information specified in paragraphs (e)(5)(ii)(A) through (C) of this section for each monitoring parameter. For those storage vessels for which the parameter monitoring plan required to be submitted under the HON Notification of Compliance Status requirements for storage vessels in §63.120(d)(2) does not require compliance with the provisions of §63.1438, the owner or operator shall provide the information specified in §63.120(d)(3) as part of the Notification of Compliance Status.

(A) The required information shall include the specific maximum or minimum level of the monitored parameter(s) for each emission point.

(B) The required information shall include the rationale for the specific maximum or minimum level for each parameter for each emission point, including any data and calculations used to develop the level and a description of why the level indicates that the combustion, recovery, or recapture device is operated in a manner to ensure compliance with the provisions of this subpart.

(C) The required information shall include a definition of the affected source's operating day, as specified in paragraph (d)(3)(ii) of this section, for purposes of determining daily average values of monitored parameters.

(iii) The determination of applicability for flexible operation units as specified in

§63.1420(e)(1)(iii).

(iv) The parameter monitoring levels for flexible operation units, and the basis on which these levels were selected, or a demonstration that these levels are appropriate at all times, as specified in §63.1420(e)(5)(ii)(A).

(v) The results for each predominant use determination made under §63.1420(f)(1) through (7), for storage vessels assigned to an affected source subject to this subpart.

(vi) If any emission point is subject to this subpart and to other standards as specified in §63.1422(j), and if the provisions of §63.1422(j) allow the owner or operator to choose which testing, monitoring, reporting, and recordkeeping provisions will be followed, then the Notification of Compliance Status shall indicate which rule's requirements will be followed for testing, monitoring, reporting, and record keeping.

(vii) An owner or operator who transfers a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream for treatment pursuant to §63.132(g) shall include in the Notification of Compliance Status the name and location of the transferee and a description of the Group 1 wastewater stream or residual sent to the treatment facility.

(6) *Periodic Reports*. For existing and new affected sources, the owner or operator shall submit Periodic Reports as specified in paragraphs (e)(6)(i) through (viii) of this section. In addition, for equipment leaks subject to §63.1434, the owner or operator shall submit the information specified in the HON periodic reporting requirements in §63.182(d), and for heat exchange systems subject to §63.1434, the owner or operator shall submit the information specified in the HON heat exchange system reporting requirements in §63.104(f)(2), as part of the Periodic Report required by this paragraph (e)(6).

(i) Except as specified in paragraphs (e)(6)(viii) of this section, a report containing the information in paragraph (e)(6)(ii) of this section or paragraphs (e)(6)(iii) through (vii) of this section, as appropriate, shall be submitted semiannually no later than 60 days after the end of each 180-day period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status is due. Subsequent reports shall cover each preceding 6-month period.

(ii) If none of the compliance exceptions in paragraphs (e)(6)(iii) through (vii) of this section occurred during the 6-month period, the Periodic Report required by paragraph (e)(6)(i) of this section shall be a statement that there were no compliance exceptions, as described in this paragraph, for the 6-month period covered by that report and that none of the activities specified in paragraphs (e)(6)(iii) through (vii) of this section occurred during the period covered by that report.

(iii) For an owner or operator of an affected source complying with the provisions of §§63.1432 through 63.1433 for any emission point, Periodic Reports shall include:

(A) All information specified in the HON periodic reporting requirements in §63.122(a)(4) for storage vessels and in §63.146(c) through §63.146(f) for process wastewater.

(B) The daily average values of monitored parameters for all excursions, as defined in §63.1438(f).

(C) The periods when monitoring data were not collected shall be specified; and

(D) The information in paragraphs (e)(6)(iii)(D)(*1*) through (*3*) of this section, as applicable:

(*1*) Notification if a process change is made such that the group status of any emission point changes from Group 2 to Group 1. The owner or operator is not required to submit a notification of a process change if that process change caused the group status of an emission point to change from Group 1 to Group 2. However, until the owner or operator notifies the Administrator that the group status of an emission point has changed from Group 1 to Group 2, the owner or operator is required to continue to comply with the Group 1 requirements for that emission point. This

notification may be submitted at any time.

(*2*) Notification if one or more emission points (other than equipment leak components subject to §63.1434), or one or more PMPU is added to an affected source. The owner or operator shall submit the information contained in paragraphs (e)(6)(iii)(D)(*2*)(i) and (*ii*) of this section.

(*i*) A description of the addition to the affected source.

(*ii*) Notification of the group status or control requirement for the additional emission point or all emission points in the PMPU.

(*3*) For process wastewater streams sent for treatment pursuant to §63.132(g), reports of changes in the identity of the treatment facility or transferee.

(E) The information in paragraph (b)(1)(ii) of this section for reports of start-up, shutdown, and malfunction.

(iv) If any performance tests are reported in a Periodic Report, the following information shall be included:

(A) One complete test report shall be submitted for each test method used for a particular kind of emission point tested. A complete test report shall contain the information specified in paragraph (e)(5)(i)(B) of this section.

(B) For additional tests performed for the same kind of emission point using the same method, results and any other information required by the test method to be in the test report shall be submitted, but a complete test report is not required.

(v) The results for each change made to a primary product determination for a PMPU made under §63.1420(e)(3) or (10).

(vi) The results for each reevaluation of the applicability of this subpart to a storage vessel that begins receiving material from (or sending material to) a process unit that was not included in the initial determination, or a storage vessel that ceases to receive material from (or send material to) a process unit that was included in the initial determination, in accordance with §63.1420(f)(8).

(vii) The Periodic Report required by the equipment leak provisions in §63.1434(f) shall be submitted as part of the Periodic Report required by paragraph (e)(6) of this section.

(viii) The owner or operator of an affected source shall submit quarterly reports for particular emission points and process sections as specified in paragraphs (e)(6)(viii)(A) through (D) of this section.

(A) The owner or operator of an affected source shall submit quarterly reports for a period of 1 year for an emission point or process section if the emission point or process section meets the conditions in paragraph (e)(6)(viii)(A)(*1*) or (*2*) of this section.

(*1*) A combustion, recovery, or recapture device for a particular emission point or process section has more excursions, as defined in §63.1438(f), than the number of excused excursions allowed under §63.1438(g) for a semiannual reporting period; or

(*2*) The Administrator requests the owner or operator to submit quarterly reports for that emission point or process section.

(B) The quarterly reports shall include all information specified in paragraphs (e)(6)(iii) through (vii) of this section, as applicable to the emission point or process section for which quarterly reporting is required under paragraph (e)(6)(viii)(A) of this section. Information applicable to other emission points within the affected source shall be submitted in the semiannual reports required under paragraph (e)(6)(i) of this section.

(C) Quarterly reports shall be submitted no later than 60 days after the end of each quarter.

(D) After quarterly reports have been submitted for an emission point for 1 year without more excursions occurring (during that year) than the number of excused excursions allowed under §63.1438(g), the owner or operator may return to semiannual

reporting for the emission point or process section.

(7) *Other reports*. Other reports shall be submitted as specified in paragraphs (e)(7)(i) through (iii) of this section.

(i) For storage vessels, the notifications of inspections required by §63.1432 shall be submitted, as specified in the HON storage vessel provisions in §63.122(h)(1) and (2).

(ii) When the conditions at §63.1420(e)(3)(iii), (e)(9), or (e)(10) are met, reports of changes to the primary product for a PMPU or process unit, as required by §63.1420(e)(3)(iii), (e)(9), or (e)(10)(iii), respectively, shall be submitted.

(iii) Owners or operators of PMPU or emission points (other than equipment leak components subject to §63.1434) that are subject to provisions for changes or additions to plant sites in §63.1420(g)(1) or (2) shall submit a report as specified in paragraphs (e)(7)(iii)(A) and (B) of this section.

(A) Reports shall include:

(*1*) A description of the process change or addition, as appropriate;

(*2*) The planned start-up date and the appropriate compliance date, according to §63.1420(g)(1) or (2); and

(*3*) Identification of the group status of emission points (except equipment leak components subject to the requirements in §63.1434) specified in paragraphs (e)(7)(iii)(A)(*3*)(*i*) through (*iii*) of this section, as applicable.

(*i*) All the emission points in the added PMPU, as described in §63.1420(g)(1).

(*ii*) All the emission points in an affected source designated as a new affected source under §63.1420(g)(2)(i).

(*iii*) All the added or created emission points as described in §63.1420(g)(2)(ii) or (iii).

(*4*) If the owner or operator wishes to request approval to use alternative monitoring parameters, alternative continuous monitoring or recordkeeping, alternative controls, or wishes to establish parameter monitoring levels according to the procedures contained in §63.1438(c) or (d), a Precompliance Report shall be submitted in accordance with paragraph (e)(7)(iii)(B) of this section.

(B) Reports shall be submitted as specified in paragraphs (e)(7)(iii)(B)(*1*) through (*3*) of this section, as appropriate.

(*1*) Owners or operators of an added PMPU subject to §63.1420(g)(1) shall submit a report no later than 180 days prior to the compliance date for the PMPU.

(*2*) Owners or operators of an affected source designated as a new affected source under §63.1420(g)(2)(i) shall submit a report no later than 180 days prior to the compliance date for the affected source.

(*3*) Owners and operators of any emission point (other than equipment leak components subject to §63.1434) subject to §63.1420(g)(2)(ii) or (iii) shall submit a report no later than 180 days prior to the compliance date for those emission points.

(8) *Operating permit application*. An owner or operator who submits an operating permit application instead of a Precompliance Report shall submit the information specified in paragraph (e)(4) of this section, as applicable, with the operating permit application.

(f) *Alternative monitoring parameters*. The owner or operator who has been directed by any section of this subpart, or any section of another subpart referenced by this subpart, that specifically references this paragraph to set unique monitoring parameters, or who requests approval to monitor a different parameter than those listed in §63.1432 for storage vessels, §63.1427 for ECO, §63.1429 for process vents, or §63.143 for process wastewater shall submit the information specified in paragraphs (f)(1) through (3) of this section in the Precompliance Report, as required by paragraph (e)(4) of this section. The owner or operator shall retain for a period of 5 years each record required by paragraphs (f)(1)

through (3) of this section.

(1) The required information shall include a description of the parameter(s) to be monitored to ensure the combustion, recovery, or recapture device; control technique; or pollution prevention measure is operated in conformance with its design and achieves the specified emission limit, percent reduction, or nominal efficiency, and an explanation of the criteria used to select the parameter(s).

(2) The required information shall include a description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation, the schedule for this demonstration, and a statement that the owner or operator will establish a level for the monitored parameter as part of the Notification of Compliance Status report required in paragraph (e)(5) of this section, unless this information has already been included in the operating permit application.

(3) The required information shall include a description of the proposed monitoring, recordkeeping, and reporting system, to include the frequency and content of monitoring, recordkeeping, and reporting. Further, the rationale for the proposed monitoring, recordkeeping, and reporting system shall be included if either condition in paragraph (f)(3)(i) or (ii) of this section is met:

(i) If monitoring and recordkeeping is not continuous; or

(ii) If reports of daily average values will not be included in Periodic Reports when the monitored parameter value is above the maximum level or below the minimum level as established in the operating permit or the Notification of Compliance Status.

(g) *Alternative continuous monitoring and recordkeeping*. An owner or operator choosing not to implement the continuous parameter operating and recordkeeping provisions listed in §63.1429 for process vents, and §63.1433 for wastewater, may instead request approval to use alternative continuous monitoring and recordkeeping provisions according to the procedures specified in paragraphs (g)(1) through (4) of this section. Requests shall be submitted in the Precompliance Report as specified in paragraph (e)(4)(iv) of this section, and shall contain the information specified in paragraphs (g)(2)(ii) and (g)(3)(ii) of this section, as applicable.

(1) The provisions in the General Provisions requirements for the use of an alternative monitoring method in §63.8(f)(5)(i) shall govern the review and approval of requests.

(2) An owner or operator of an affected source that does not have an automated monitoring and recording system capable of measuring parameter values at least once during approximately equal 15-minute intervals and that does not generate continuous records may request approval to use a nonautomated system with less frequent monitoring, in accordance with paragraphs (g)(2)(i) and (ii) of this section.

(i) The requested system shall include visual reading and recording of the value of the relevant operating parameter no less frequently than once per hour. Daily averages shall be calculated from these hourly values and recorded.

(ii) The request shall contain:

(A) A description of the planned monitoring and recordkeeping system;

(B) Documentation that the affected source does not have an automated monitoring and recording system;

(C) Justification for requesting an alternative monitoring and recordkeeping system; and

(D) Demonstration that the proposed monitoring frequency is sufficient to represent combustion, recovery, or recapture device operating conditions, considering typical variability of the specific process and combustion, recovery, or recapture device operating parameter being monitored.

(3) An owner or operator may request approval to use an automated data compression recording system that does not record monitored operating parameter values at a set frequency (for example, once at approximately equal intervals of about 15 minutes), but that records all values that meet set criteria for variation from previously recorded values, in accordance with paragraphs (g)(3)(i) and (ii) of this section.

(i) The requested system shall be designed to:

(A) Measure the operating parameter value at least once during approximately equal 15-

minute intervals;

(B) Record at least four values each hour during periods of operation;

(C) Record the date and time when monitors are turned off or on;

(D) Recognize unchanging data that may indicate the monitor is not functioning properly, alert the operator, and record the incident;

(E) Calculate daily average values of the monitored operating parameter based on all measured data; and

(F) If the daily average is not an excursion, as defined in §63.1438(f), the data for that operating day may be converted to hourly average values and the four or more individual records for each hour in the operating day may be discarded.

(ii) The request shall contain:

(A) A description of the monitoring system and data compression recording system, including the criteria used to determine which monitored values are recorded and retained;

(B) The method for calculating daily averages; and

(C) A demonstration that the system meets all criteria in paragraph (g)(3)(i) of this section.

(4) An owner or operator may request approval to use other alternative monitoring systems according to the procedures specified in the General Provisions' requirements for using an alternative monitoring method in §63.8(f)(4).

(h) *Reduced recordkeeping program*. For any parameter with respect to any item of equipment, the owner or operator may implement the recordkeeping requirements in paragraph (h)(1) or (2) of this section as alternatives to the continuous operating parameter monitoring and recordkeeping provisions that would otherwise apply under this subpart. The owner or operator shall retain for a period of 5 years each record required by paragraph (h)(1) or (2) of this section.

(1) The owner or operator may retain only the daily average value, and is not required to retain more frequent monitored operating parameter values, for a monitored parameter with respect to an item of equipment, if the requirements of paragraphs (h)(1)(i) through (iv) of this section are met. An owner or operator electing to comply with the requirements of paragraph (h)(1) of this section shall notify the Administrator in the Notification of Compliance Status or, if the Notification of Compliance Status has already been submitted, in the Periodic Report immediately preceding implementation of the requirements of paragraph (h)(1) of this section.

(i) The monitoring system is capable of detecting unrealistic or impossible data during periods of operation other than start-ups, shutdowns or malfunctions (e.g., a temperature reading of −-200 °C on a boiler), and will alert the operator by alarm or other means. The owner or operator shall record the occurrence. All instances of the alarm or other alert in an operating day constitute a single occurrence.

(ii) The monitoring system generates, updated at least hourly throughout each operating day, a running average of the monitoring values that have been obtained during that operating day, and the capability to observe this running average is readily available to the Administrator on-site during the operating day. The owner or operator shall record the occurrence of any period meeting the criteria in paragraphs (h)(1)(ii)(A) through (C) of this section. All instances in an operating day constitute a single occurrence.

(A) The running average is above the maximum or below the minimum established limits;

(B) The running average is based on at least six 1-hour average values; and

(C) The running average reflects a period of operation other than a start-up, shutdown, or malfunction.

(iii) The monitoring system is capable of detecting unchanging data during periods of operation other than start-ups, shutdowns or malfunctions, except in circumstances where the presence of unchanging data are the expected operating condition based on past experience (e.g., pH in some scrubbers), and will alert the operator by alarm or other means. The owner or operator shall record the occurrence. All instances of the

alarm or other alert in an operating day constitute a single occurrence.

(iv) The monitoring system will alert the owner or operator by an alarm or other means, if the running average parameter value calculated under paragraph (h)(1)(ii) of this section reaches a set point that is appropriately related to the established limit for the parameter that is being monitored.

(v) The owner or operator shall verify the proper functioning of the monitoring system, including its ability to comply with the requirements of paragraph (h)(1) of this section, at the times specified in paragraphs (h)(1)(v)(A) through (C) of this section. The owner or operator shall document that the required verifications occurred.

(A) Upon initial installation.

(B) Annually after initial installation.

(C) After any change to the programming or equipment constituting the monitoring system, which might reasonably be expected to alter the monitoring system's ability to comply with the requirements of this section.

(vi) The owner or operator shall retain the records identified in paragraphs (h)(1)(vi)(A) through (D) of this section.

(A) Identification of each parameter, for each item of equipment, for which the owner or operator has elected to comply with the requirements of paragraph (h) of this section.

(B) A description of the applicable monitoring system(s), and how compliance will be achieved with each requirement of paragraphs (h)(1)(i) through (v) of this section. The description shall identify the location and format (e.g., on-line storage, log entries) for each required record. If the description changes, the owner or operator shall retain both the current and the most recent superseded description, as specified in paragraph (h)(1)(vi)(D) of this section.

(C) A description, and the date, of any change to the monitoring system that would reasonably be expected to affect its ability to comply with the requirements of paragraph (h)(1) of this section.

(D) The owner or operator subject to paragraph (h)(1)(vi)(B) of this section shall retain the current description of the monitoring system as long as the description is current. The current description shall, at all times, be retained on-site or be accessible from a central location by computer or other means that provides access within 2 hours after a request. The owner or operator shall retain all superseded descriptions for at least 5 years after the date of their creation. Superseded descriptions shall be retained on-site (or accessible from a central location by computer or other means that provides access within 2 hours after a request) for at least 6 months after their creation. Thereafter, superseded descriptions may be stored off-site.

(2) If an owner or operator has elected to implement the requirements of paragraph (h)(1) of this section for a monitored parameter with respect to an item of equipment and a period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this section, the owner or operator is no longer required to record the daily average value, for any operating day when the daily average is less than the maximum, or greater than the minimum established limit. With approval by the Administrator, monitoring data generated prior to the compliance date of this subpart shall be credited toward the period of 6 consecutive months, if the parameter limit and the monitoring accomplished during the period prior to the compliance date was required and/or approved by the Administrator.

(i) If the owner or operator elects not to retain the daily average values, the owner or operator shall notify the Administrator in the next Periodic Report. The notification shall identify the parameter and unit of equipment.

(ii) If, on any operating day after the owner or operator has ceased recording daily average values as provided in paragraph (h)(2) of this section, there is an excursion as defined in paragraph (h)(2)(iv) of this section, the owner or operator shall immediately resume

retaining the daily average value for each operating day and shall notify the Administrator in the next Periodic Report. The owner or operator shall continue to retain each daily average value until another period of 6 consecutive months has passed without an excursion as defined in paragraph (h)(2)(iv) of this section.

(iii) The owner or operator shall retain the records specified in paragraph (h)(1) of this section, for the duration specified in paragraph (h) of this section. For any calendar week, if compliance with paragraphs (h)(1)(i) through (iv) of this section does not result in retention of a record of at least one occurrence or measured parameter value, the owner or operator shall record and retain at least one parameter value during a period of operation other than a start-up, shutdown, or malfunction.

(iv) For the purposes of paragraph (h) of this section, an excursion means that the daily average of monitoring data for a parameter is greater than the maximum, or less than the minimum established value, except as provided in paragraphs (h)(2)(iv)(A) and (B) of this section.

(A) The daily average value during any start-up, shutdown, or malfunction shall not be considered an excursion for purposes of paragraph (h)(2) of this section, if the owner or operator follows the applicable provisions of the start-up, shutdown, and malfunction plan required by the General Provisions in §63.6(e)(3).

(B) An excused excursion, as described in §63.1438(g), shall not be considered an excursion for the purposes of paragraph (h)(2) of this section.

[45CSR13, Permit No. R13-2443 -(Condition B.4.) and 40 C.F.R. §63.1439]

8.4.5. 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 open air and the operator shall record all such incidents and the associated emissions estimated from direct measurements of toxic air pollutant concentration and/or calculations using other process measurements.
[45CSR13, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-3.4 State-Enforceable only]

8.4.6. Written records shall be maintained that identify all pumps, compressors, pressure relief valves, 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.
[45CSR13, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-10.3 State-Enforceable only]

8.5. Reporting Requirements

8.5.1. 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:

10.4.a. For ethylene oxide, and vinyl chloride, one (1) pound

10.4.c. 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.
[45CSR13, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-10.4 State-Enforceable only]

8.5.2. Any period of failure or inoperability of air pollution control equipment required by this rule 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 45CSR§27-12. **[45CSR13, Permit No. R13-2443 -(Condition B.5.) and 45CSR§27-10.5 State-Enforceable only]**

8.6. Compliance Plan

N/A

9.0 Source-Specific Requirements [Texin]

9.1. Limitations and Standards

9.1.1 The TEXIN production line #4 shall be comprised of only that equipment shown in Table 1 - Equipment List.

Table 1 - Equipment List

Source ID	Description	Pollution Control		Emission Point
		ID	Device	
022-1080	Additive Batch Tank	-	None	TX4-1
022-1082	Mixer	-	None	TX4-1
022-1083	Product Cure Oven	-	None	TX4-1
022-1076	Hold Tank	-	None	TX4-2
022-0118	Mix Tank	-	None	TX4-3
022-0831	Cyclone	022-0970	Baghouse	TX4-4

[45CSR13, Permit No. R13-2507 -(Condition A.1.) (022-1080, 022-1082, 022-1083, 022-1076, 022-0118, 022-0831)]

9.1.2. The TEXIN production line #4 shall be limited to a maximum operating schedule of 8,760 hours per year. **[45CSR13, Permit No. R13-2507 -(Condition A.2.) (022-1080, 022-1082, 022-1083, 022-1076, 022-0118, 022-0831)]**

9.1.3. The TEXIN production line #4 shall not exceed the maximum emission rates shown in Table 2 - Emission Limits.

Table 2 - Emission Limits

Emission Point	Pollutant	Emission Rate	
		Hourly (lbs/hr)	Annual (lbs/yr)
TX4-1	VOC	0.0006	5.3
TX4-2	VOC	0.0005	4.4
TX4-3	VOC	0.0005	4.4
TX4-4	PM	0.08	701

[45CSR13, Permit No. R13-2507 -(Condition A.3.) Compliance with this limit assures compliance with 45CSR§7-4.1. (022-1080, 022-1082, 022-1083, 022-1076, 022-0118, 022-0831)]

9.1.4. No person shall cause, suffer, allow or permit any manufacturing process or storage structure generating fugitive particulate matter to operate that is not equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the

emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.
[45CSR§7-5.1. (022-1082, 022-1083, 022-0831)]

9.1.5. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-2507 and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, Permit No. R13-2507 -(Condition C.3.) (022-1080, 022-1082, 022-1083, 022-1076, 022-0118, 022-0831)]

9.1.6. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20%) percent opacity.
[45CSR§7-3.1. (022-0831, 022-0970)]

9.1.7. The provisions of 9.1.6 above 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 (60)minute period.
[45CSR§7-3.2. (022-0831, 022-0970)]

9.1.8. The maximum HAP emissions shall not exceed 0.2 tons per year for Lines 1, 2 and 3 combined in any twelve rolling month period, calculated as shown in Condition 9.4.5.
[45CSR§30-12.7. (022-732, 022-813, 022-889, 022-841, 022-841b, 022-570, 022-814, 022-890)]

9.2. Monitoring Requirements

9.2.1. Quarterly visual emission checks of each emission point subject to an opacity limit shall be conducted. For units emitting directly into the open air from points other than a stack outlet, visible emissions are to include visible fugitive dust emissions that leave the plant site boundaries. These checks shall be conducted during periods of normal facility operation for a sufficient time interval to determine if the unit has visible emissions using procedures outlined in 40 CFR 60, Appendix A, Method 22. If sources of visible emissions are identified during the survey, or at any other time, the permittee shall conduct an evaluation as outlined in 45CSR§7A-2.1.a,b within twenty-four (24) hours. A 45CSR§7A-2.1.a,b evaluation shall not be required if the visible emission condition is corrected in a timely manner and the units are operated at normal operating conditions. A record of each visible emission check required above shall be maintained on site. Said record shall include, but not be limited to, the date, time, name of emission unit, the applicable visible emissions requirement, the results of the check, what action(s), if any, was/were taken, and the name of the observer.
If visible emissions are identified from Method 22 at any test, the Permittee must complete six (6) consecutive months of no visible emissions detected before going to quarterly monitoring.
[45CSR§7A-2.1a,b (022-0831, 022-0970)]

9.2.2. The Permittee shall monitor the amount of Production Units produced in Lines #1, 2 and 3 on a daily basis and summarize monthly.
[45CSR§30-5.1.c.]

9.3. Testing Requirements

N/A

9.4. Recordkeeping Requirements

9.4.1. For the purpose of determining compliance with permit limits based on operating schedule and emission limits as described in Specific Requirements 9.1.2. and 9.1.3, the permittee shall maintain certified daily records of the hours of operation for the TEXIN production Line #4. This information shall be maintained on-site and made available to the Director or his duly authorized representative upon request. At a time in which the information is requested, all records shall be certified and signed by a "Responsible Official" prior to being submitted to the Director.
[45CSR13, Permit No. R13-2507 -(Condition B.3.)]

9.4.2. For the purpose of determining compliance with the permit limits based on the emission limits of Emission Point TX4-4, as described in Condition 9.1.3, the permittee shall maintain certified daily records of the performance observations conducted on the TEXIN production Line #4 baghouse. This information shall be maintained on-site and made available to the Director or his duly authorized representative upon request. At a time in which the information is requested, all records shall be certified and signed by a "Responsible Official" prior to being submitted to the Director.
[45CSR13, Permit No. R13-2507 -(Condition B.4.)]

9.4.3. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the following:
Storage vessels with a capacity greater than or equal to 40 cubic meters (m^3) that is used to store volatile organic liquids (VOL's) for which construction, reconstruction, or modification commenced after July 23, 1984.
[45CSR16, 40CFR§60.110b Subpart Kb. (023-502, 023-508)]

9.4.4. Records of the total amount of Texin produced by the individual extruders (022-570, 022-814, and 022-890) shall be maintained on a rolling 12-month basis.
[45CSR§30-5.1.c.]

9.4.5. HAP emissions from Lines #1, 2 and 3 shall be calculated using the following equation:

$$ET = \sum (U_i \times EF_i)$$

Where ET = Combined emissions of HAPs from Lines 1, 2, and 3 (lbs)
U_i = units produced in that line
EF_i = Emission factor for individual line (See Table 9.4.5)

Table 9.4.5

	Line #1	Line #2	Line #3
Emission Factor (EF_i)	0.0135 lbs HAPs/unit produced	0.0135 lbs HAPs/unit produced	0.0107 lbs HAPs/unit produced

[45CSR§30-5.1.c.]

9.5. Reporting Requirements

N/A

9.6. Compliance Plan

N/A

10.0 Source-Specific Requirements [MPP]

10.1. Limitations and Standards

10.1.1. To ensure compliance with the HAP PTE, the total amount of Production Units shall not exceed 1030 per year on a rolling 12-month basis. HAP emissions shall be calculated as shown in Condition 10.4.2.
[45CSR§30-12.7. (PCV001.2)]

10.2. Monitoring Requirements

10.2.1. The Permittee shall monitor the amount of Production Units produced on a daily basis and summarize monthly.
[45CSR§30-5.1.c.]

10.3. Testing Requirements

N/A

10.4. Recordkeeping Requirements

10.4.1. The Permittee shall maintain records of the Production Units produced in the MPP Section on a rolling 12-month basis.
[45CSR§30-5.1.c.]

10.4.2. HAP emissions from MPP (excluding fugitives) shall be calculated using the following equation:

$$ET = \sum (U \times EF)$$

Where ET =HAP emissions (lbs)
U = Production Units
EF = Emission factor for MPP (See Table 10.4.2)

Table 10.4.2

Emission Factor (EF)	0.067 lbs HAP/unit produced

[45CSR§30-5.1.c.]

10.5. Reporting Requirements

N/A

10.6. Compliance Plan

N/A

11.0 Source-Specific Requirements [ATP]

11.1. Limitations and Standards

11.1.1. The permittee shall not exceed the maximum hourly and annual emission rates set forth in permit applications R13-1040, R13-1040A, and R13-1040B, and summarized below:

Emission Point	Chemical	Maximum Emission Rates	
		(lb/hr)	(lb/yr)
SC15(2)	Volatile Organic Compound (VOC)	4.75 lbs/batch(1)	950.00
CV34(3)(4)	VOC	0.01	49.20
CV36(4)	Amine Terminated Poly-Ether (ATPE)	0.12	30.30
CV37(4)	ATPE	0.002	1.00
	Prepolymer	0.001	0.50
CV38(4)	ATPE	0.012	3.60

(1) Duration of batch is 44.05 hours.
(2) VOC emission limits for emission point SC15 are given after controls. The aspartate ester reactor (4500-001), and the product drumming and tote charging systems are vented to a venturi scrubber which in turn vents to the atmosphere/emission point SC15. The venturi scrubber has a VOC removal efficiency of 50%.
(3) Emission point from CB Coatings Product Storage Tank (5000-515). Emission point CV35 eliminated.
(4) Emission point from idle equipment previously permitted under R13-1040.

[45CSR13, Permit No. R13-1040 - (Condition A.1.) (SC15, CV34, CV36, CV37, CV38)]

11.1.2. The permittee shall operate and maintain all control devices listed in permit applications R13-1030, R13-1040A and R13-1040B in such a manner as to achieve the above maximum emission rates or better.
[45CSR13, Permit No. R13-1040 -(Condition A.2.) (SC15, CV34, CV36, CV37, CV38)]

11.1.3. The carbon adsorption drum (Emission Point CV34) must be changed out at least once every two (2) years or earlier if breakthrough is detected.
[45CSR13, Permit No. R13-1040 -(Condition A.3.) (CV34)]

11.1.4. The permitted facility shall be constructed and operated in accordance with information filed in Permit Applications R13-1040, R13-1040A and R13-1040B, and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, Permit No. R13-1040 -(Condition C.3.)]

11.1.5. The aspartate ester process shall be operated only when the venturi scrubber is in operation. The following equipment shall be vented to the venturi scrubber:

Asparate Ester Reactor (4500-0001)
Tote Weigh/Reactor Charging Station
Product Drumming System

[45CSR13, Permit No. R13-1040 -(Condition A.4.)]

11.2. Monitoring Requirements

N/A

11.3. Testing Requirements

N/A

11.4. Recordkeeping Requirements

11.4.1. For the purpose of determining compliance with the maximum annual VOC emission limitations listed in 11.1.1, the permittee shall maintain records of the following reactor and tank parameters on a daily basis for storage tank(s) and continuous reactor(s), and on a batch basis for batch reactor(s):

Reactor and Tank Parameters*
Fill Rates
Throughputs
Temperatures
Hours of Operation

* Reactor and tank physical properties, such as equipment diameter, height, color, etc., are fixed and should not change from what was specified in Permit Application R13-1040B, R13-1040A and/or R13-1040.

The above records shall be maintained on site for a period of five (5) years. The reactor annual emission rates shall be calculated using actual recorded values for the above parameters. Certified copies of the reactor records, calculated annual emission rates, and supporting calculations shall be made available to the Director or his duly-authorized representative upon request.
[45CSR13, Permit No. R13-1040 -(Condition B.2.) (SC15, CV34)]

11.4.2. For the purpose of determining compliance with Condition 11.1.3, the permittee shall maintain records of actual change-out dates for the carbon adsorption drum. Certified copies of these records shall be made available to the Director or his duly-authorized representative upon request.
[45CSR13, Permit No. R13-1040 -(Condition B.3.) (CV34)]

11.5. Reporting Requirements

N/A

11.6. Compliance Plan

N/A

12.0 Source-Specific Requirements [SPU]

12.1. Limitations and Standards

12.1.1. Volatile Organic Compound (VOC) emissions from the following emission points shall not exceed the hourly and annual limitations specified below:

Emission Point ID No.	Air Pollution Control Device	Source of Emissions	Equipment Identification Number	VOC Emission Rate After Controls	
				(lb/hr)	(lb/yr)
AE-1 (AE1)	NONE	Desmodur H (HDI) Storage Tank 13-15	020-648	0.02	0.95
AE-2 (AE2)	NONE	Desmodur I (IPDI) Storage Tank 13-17	020-641	0.01	0.17
AE-4 (AE4)	NONE	Polyester PE 170HN A Storage Tank 3-23	2000-540	0.74	6444.2
AE-9 (AE9)	CARBON DRUM (060-003)	Aliphatic Isocyanate Weigh Tank	060-001	0.01	0.01
AE-10 (AE10)	ACETONE SCRUBBER (2000-629)	Acetone Storage Tank Acetone Recovery Tank Acetone Column Vent Condenser	2000-644 2000-645 2000-638	1.44 (1)	323.2 (1)
AE-13 (AE13)	NONE	Kathion Hold Tank	060-038	0.01	0.01
AE-15 (AE15)	NONE	Tank Truck Loading	026	0.73	346.8
AE-16 (AE16)	NONE	Drummer / Drumming Area	060-043	0.08	304
AE-17 (AE17)	ACETONE SCRUBBER (060-064)	Prepolymer Reactor Distillation Reactor Acetone Pump Tank Polyester Weigh Tank Polyether Weigh Tank Chain Extender Weigh Tank Chain Extender Weigh Tank II Neutralizer Weigh Tank Formulations Reactor SPU Waste Water Surge Tank Waste Water Tank	060-009 060-022 060-051 060-008 060-004 060-053 060-007 060-056 060-034 026-775 026-776	1.68 (2)	1394 (2)
AE-19 (AE19)	NONE	13-14 Storage Tank for Trimethyolpropane (TMP)	026-140	0.47	15 (3A)
AE-20 (AE20)	NONE	3-24 Storage Tank for Ethylene Glycol (EG)	2000-501	0.07	6.1 (3B)
AE-21 (AE21)	NONE	Storage Tank for ButaneDiol	089-004	0.41 (3C)	120 (3C)
AE-24 (AE24)	NONE	Waste Glycol Trailer	Not Applicable	0.06	0.36
AE-26 (AE26)	NONE	N-methylpyrrolidone (NMP) Storage Tank 3-17	2000-632	0.07	7.18
AE-27 (AE27)	NONE	Ethylene Glycol Cleaning Tank	060-018	0.12	0.75
AE-28 (AE28)	NONE	PE225B Storage Tank 3-12	2000-650	0.35	3077
Unnumbered	CARBON DRUM	DES-W Tank - 13-26	020-400	0.01	0.04 (3D)

Emission Point ID No.	Air Pollution Control Device	Source of Emissions	Equipment Identification Number	VOC Emission Rate After Controls	
				(lb/hr)	(lb/yr)
Unnumbered	SCRUBBER	Hydrazine Tank Existing	089-041	0.08 (3E)	3.7 (3E)
Total				6.31	13,044

(1) Equipment vented to Scrubber (2000-629) on a continuous bases.
(2) Equipment vented to Scrubber (060-003) on a continuous bases.
(3) Existing tank used by more than one process:
A. Annual emission rate based on Project 498 (2/24/84). For the PUD facility only, the VOC emission rate would be 1.03 lb/yr.
B. Annual emission rate calculated from total use. For the PUD facility only, the VOC emission rate would be 0.33 lb/yr.
C. Annual and hourly emission rates equal to sum of R13-1260 and PUD facility. For the PUD facility only, the VOC emission rates would be 0.2 lb/hr and 1.29 lb/yr.
D. Annual emission rate calculated from total use. For the PUD facility only, the VOC emission rate would be 0.01 lb/yr.
E. Hourly emission rate based on project 464A (4/22/82). Annual emission rate calculated from total use. For the PUD facility only, the VOC emission rates would be 0.01 lb/hr and 0.1 lb/yr.

[45CSR13, Permit No. R13-2351 -(Condition A.1.) (AE1, AE-2, AE-4, AE-9, AE-10, AE-13, AE-15, AE-16, AE-17, AE-19, AE-20, AE-21, AE-24, AE-26, AE-27, AE-28, 020-400, 089-041)]

12.1.2. Scrubber 2000-629 (Emission Point AE-10) shall have a 95% removal efficiency for acetone. Water flow through the scrubber shall be 8.5 gallons per minute or greater.
[45CSR13, Permit No. R13-2351 -(Condition A.3.) (AE-10)]

12.1.3. Scrubber 060-064 (Emission Point AE-17) shall have a 95% removal efficiency for acetone. Water flow through the scrubber shall be 12.2 gallons per minute or greater.
[45CSR13, Permit No. R13-2351 -(Condition A.4.) (AE-17)]

12.1.4. The maximum HAP emissions shall not exceed 4.6 tons per year for the product groups shown in Table 12.4.5 in any twelve month rolling period, calculated as shown in Condition 12.4.5.
[45CSR§30-12.7. (026-092, 026-662, 026-762, 026-663, 026-644, 026-642, 026-524, 026-552, 026-653, 026-233, 026-654, 026-794,, 026-522, 026-230, 026-645, 026-756, 026-752, 032-001, 032-006, 032-002, 032-003, 032-005, 032-030, 032-031, 032-539, 026-001, 026-008, 026-592.1, 026-592.2, 026-548.1, 026-548.2, 026-548.3, 026-078, 026-550, 026-079, 026-547.2, 026-541, 026-543, 026-545, 026-547.1, 026-807, 026-809, 026-811, 026-813, 026-814, 026-804, 026-589, 026-555, 026-076, 026-533, 026-588)]

12.2. Monitoring Requirements

12.2.1. Carbon adsorption drum 060-003 (Emission Point AE-9) must be changed out at least once every two (2) years or earlier if breakthrough is detected.
[45CSR13, Permit No. R13-2351 -(Condition A.5.)]

12.2.2 The Permittee shall monitor the amount of Production Units produced for the product groups listed in Table 12.4.5 on a monthly basis.
[45CSR§30-5.1.c.]

12.2.3. A routine program shall be established and performed to ensure the minimization of fugitive emissions. This program shall include:
a) A minimum of weekly walk-throughs to examine equipment for leaks using visual and olfactory means.
b) The documentation of any equipment leaks.

c) Prompt isolation or repair of any leaks.
[45CSR§30-5.1.c.]

12.2.4. The Permittee shall monitor the amount of xylene and phthallic anhydride transferred on a daily basis and summarize monthly.
[45CSR§30-5.1.c.]

12.3. Testing Requirements

N/A

12.4. Recordkeeping Requirements

12.4.1. The Permittee shall keep daily records of the scrubber water flow usage rates. These records shall be maintained on site.
[45CSR§30-5.1.c.]

12.4.2. For the purpose of determining compliance with the maximum annual VOC emission limitations listed in 12.1.1, the permittee shall maintain records on a batch and a monthly bases for the following tank and reactor parameters:

Tank and Reactor Parameters*
Fill Rates
Throughputs
Temperatures
Hours of Operation

* Tank and reactor physical properties, such as equipment diameter, height, color, etc. are fixed and should not change from what was specified in Permit Application R13-2351.

The above records shall be maintained on site for a period of five (5) years. The process' annual emission rates shall be calculated using actual recorded values for the tank and reactor parameters. Certified copies of the tank and reactor records, calculated annual process emission rates, and supporting calculation shall be made available to the Director or his duly-authorized representative upon request.
[45CSR13, Permit No. R13-2351 -(Condition B.3)]

12.4.3. For the purpose of determining compliance with Condition 12.2.1, the permittee shall maintain records of actual change-out dates for the carbon adsorption drum. Certified copies of these records shall be made available to the Director or his duly-authorized representative upon request.
[45CSR13, Permit No. R13-2351 -(Condition B.4.)]

12.4.4. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the following:
Storage vessels with a capacity greater than or equal to 40 cubic meters (m^3) that is used to store volatile organic liquids (VOL's) for which construction, reconstruction, or modification commenced after July 23, 1984.
[45CSR13, Permit No. R13-2351 -(Condition B.1.), 40 CFR 60.110b Subpart Kb. (089-039, 2000-644, 2000-645)]

12.4.5 HAP emissions from the product groups listed below shall be calculated using the following equation:

$$ET = \sum (U_i \times EF_i)$$

Where ET = Combined emissions of HAPs (lbs) from all product groups
U_i = units produced from each product group
EF_i = Emission factor for the particular product group (See Table 12.4.5)

Table 12.4.5

Product Group	EF (lbs HAPs/unit produced)
Aloph	0.0007
Prepols 1	0.000125
Prepols 2	0.482
Prepols 3	7.5718
Isobl 1	0.029
Isobl 2	0.0001
PHD	0.030
Polyester 1	0.712442
Polyester 2	6.386307
Polyester 3	33.690
Polyester 4	3.776645

[45CSR§30-5.1.c.]

12.4.6. The Permittee shall maintain records of the Production Units produced in the SPU Section on a rolling 12-month basis.
[45CSR§30-5.1.c.]

12.4.7. The Permittee shall maintain monthly records of the walk-throughs to examine equipment for leaks.
[45CSR§30-5.1.c.]

12.4.8. The Permittee shall maintain records of the xylene and phthallic anhydride transferred on a rolling 12-month basis.
[45CSR§30-5.1.c.]

12.5. Reporting Requirements

N/A

12.6. Compliance Plan

N/A

13.0 Source-Specific Requirements [Materials Handling Department (MHD)]

13.1. Limitations and Standards

13.1.1. Tank 558 and Tank 559 shall not exceed a total combined maximum annual throughput of 10,000,000 gallons per year.
[45CSR13, R13-1409 – (Condition 4.1.1.)]

13.1.2. Loading Rack 05L shall not exceed a maximum annual throughput of 10,000,000 gallons per year.
[45CSR13, R13-1409 – (Condition 4.1.2.)]

13.1.3. All displaced vapors released from Tank 558, Tank 559, and Loading Rack 05L shall be directed through and controlled by the carbon adsorption units.
[45CSR13, R13-1409 – (Condition 4.1.3.)]

13.1.4. Emissions released from the permitted sources identified in Table 13.1.4.a of this permit shall be limited to the pollutants and associated emission rates shown in Table 13.1.4.b of this permit.

Table 13.1.4.a.

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
Tank 558	CA24	TD Tank	1991	40,000 gal	Carbon Adsorption
Tank 559	CA25	TDS Tank	1991	40,000 gal	Carbon Adsorption
05L Loading Rack	CA26	TD/TDS Loading	1991	N/A	Carbon Adsorption
	CA27	Benzoyl Chloride Injection System	1991	N/A	Carbon Adsorption

Table 13.1.4.b.

Emission Point ID	VOC		HAP[1]	
	Hourly (lb/hr)	Annual (tpy)	Hourly (lb/hr)	Annual (tpy)
CA24	0.1	0.01	0.1	0.01
CA25	0.1	0.01	0.1	0.01
CA26	0.1	0.01	0.1	0.01
CA27	0.1	0.01	--	--

1 - HAP emissions shall be limited to toluene diisocyanate (TDI).

[45CSR13, R13-1409 – (Condition 4.1.4.)]

13.1.5. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate the carbon adsorption units on Tank 558, Tank 559, and Loading Rack 05L 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. **[45CSR§13-5.11; 45CSR13, R13-1409 – (Condition 4.1.7.)]**

~~13.1.6. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in Condition 13.1.7.~~
~~**[45CSR§7-3.1. (15NN and 15OO)]**~~

~~13.1.7 The provisions of Condition 13.1.6 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.~~
~~**[45CSR§7-3.2. (15NN and 15OO)]**~~

~~13.1.8. 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 of 45CSR7.~~

~~Hydrochloric acid mist and/or vapor for source operations installed after July 1, 1970: 210 mg/m^3~~

~~**[45CSR§7-4.2 and Table 45-7B. (15NN and 15OO)]**~~

~~13.1.9. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 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.~~
~~**[45CSR§7-9.1. (15NN and 15OO)]**~~

13.2. Monitoring Requirements

13.2.1. For the purpose of determining compliance with the limits set forth in Conditions 13.1.1, 13.1.2, and 13.1.4 of this permit, the permittee shall monitor the monthly material throughput of Tanks 558 and 559, and Loading Rack 05L.
[45CSR13, R13-1409 - (Condition 4.2.1.)]

13.2.2. For the purpose of determining compliance with the limits set forth in 13.1.3, the permittee shall conduct routine monitoring of the adsorption units on a quarterly basis. When breakthrough is determined, the subject carbon adsorption unit shall be replaced.
[45CSR13, R13-1409 - (Condition 4.2.2.)]

~~13.2.3. The Permittee shall monitor the amount of isocyanates, xylene and phthallic anhydride received from off-site on a daily basis and summarize monthly. The total amount of isocyanates shall be assumed to be equally distributed among the all storage tanks for the purposes of emissions calculations.~~
~~**[45CSR30-5.1.c]**~~

13.3. Testing Requirements

N/A

13.4. Recordkeeping Requirements

13.4.1. **Record of Monitoring.** 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.

[45CSR13, R13-1409 - (Condition 4.4.1.)]

13.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For the carbon adsorption units on Tank 558, Tank 559, and Loading Rack 05L, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13, R13-1409 - (Condition 4.4.2.)]

13.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For the carbon adsorption units on Tank 558, Tank 559, and Loading Rack 05L, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

a. The equipment involved.

b. Steps taken to minimize emissions during the event.

c. The duration of the event.

d. The estimated increase in emissions during the event.

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

e. The cause of the malfunction.

f. Steps taken to correct the malfunction.

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

[45CSR13, R13-1409 - (Condition 4.4.3.)]

13.4.4. For the purpose of demonstrating compliance with the recordkeeping requirements set forth in Condition 13.2.1 of this permit, the permittee shall maintain monthly throughput records associated with the operation of Tanks 558 and 559, and Loading Rack 05L.
[45CSR13, R13-1409 - (Condition 4.4.4.)]

13.4.5. For the purpose of demonstrating compliance with the recordkeeping requirements set forth in Condition 13.2.2 of this permit, the permittee shall maintain quarterly records of the inspection and maintenance activities associated with the carbon adsorption units.
[45CSR13, R13-1409 - (Condition 4.4.5.)]

13.4.6. For Tanks 558 and 559, the permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be maintained for the life of the source.
[45CSR16; 40CFR§§60.116b(a) and (b); 45CSR13, R13-1409 – (Condition 4.4.6.)]

13.4.7. For Tanks 558 and 559, the permittee shall maintain a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
[45CSR16; 40 CFR§60.116b(c); 45CSR13, R13-1409 – (Condition 4.4.6.)]

13.4.8. Compliance with all hourly emission limits set forth by Condition 13.1.4 of this permit shall be determined by using a monthly averaged hourly rate. A monthly averaged hourly rate shall be based on the total monthly sum of emissions divided by the total hours of operation for the month during the monitoring period. Compliance with all annual emission limits set forth by Condition 13.1.4 of this permit shall be determined by using a 12-month rolling total. A 12-month rolling total shall mean the sum of emissions at any given time for the previous twelve (12) consecutive calendar months.
[45CSR13, R13-1409 - (Condition 4.4.7.)]

13.4.9. The permittee shall maintain records of all information required by Section 13 (including monitoring data, support information, reports, and notification), recorded in a form suitable and readily available for expeditious inspection and review. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on-site. The remaining three (3) years of data may be maintained off-site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically, on microfilm, or on microfiche.

Certified copies of these records shall be made available to the Director of the Division of Air Quality or his duly authorized representative upon request. At a time prior to submittal to the Director, all records shall be certified and signed by a "Responsible Official" utilizing the Certification of Data Accuracy statement provided in Appendix C. If these records are considered to contain confidential business information as identified in the permit application, the records may be submitted according to the procedures set forth in 45CSR31 – "Confidential Information."
[45CSR13, R13-1409 (Condition 4.4.8.)]

~~13.4.10. The Permittee shall maintain records of the isocyanates, xylene and phthallic anhydride received in the MHD Section on a rolling 12-month basis.~~
~~**[45CSR§30-5.1.c.]**~~

13.5. Reporting Requirements

N/A

13.6. Compliance Plan

N/A

APPENDIX A

Rule 2 Monitoring Plan

45 CSR 2
Registration, Monitoring and Recordkeeping Plan

Bayer Corporation
New Martinsville

Facility Information:

Facility Name: Bayer MaterialScience LLC

Facility Address: Rt.2, Box 500
New Martinsville, WV 26155

Facility Environmental Contact: M. A. Henderson

Bayer, New Martinsville is a chemical manufacturing facility with the following Type 'b' combustion units discharging through individual stacks.

TABLE 1A

Unit ID	DHI (mmBTU/hr)	Fuel Source
~~Boiler #7 (02B)~~	~~154.5~~	~~Natural Gas~~
~~Boiler #8 (02B)~~	~~142.1~~	~~Natural Gas~~
Boiler #9 (022)	246.1	Natural Gas
Boiler #10 (22A)	171.3	Natural Gas
Boiler #11	98	Natural Gas
Fluid Bed Incinerator #4	40	Natural Gas, Distillate Oil, Hazardous Waste
Sum of DHI for all units	~~812~~ 555.4	

All fuel burning units are Type 'b' fuel burning units as defined in 45 CSR 2 – 2.10.b.

§45-2A-3. APPLICABILITY

§45-2A-3.1 This rule applies to any fuel burning unit(s) having a design heat input (DHI) over ten (10) million BTU/hr.

Based on this applicability, the following units are exempt from the rule.

TABLE 2A

Unit ID	DHI (mmBTU/hr)	Fuel Source
None		

§45-2A-3.1.a. The owner or operator of a fuel burning unit(s) which combusts only natural gas shall be exempt from sections 5 and 6.
§45-2A-3.1.b. The owner or operator of a fuel burning unit(s) with a DHI of less than 100 mmBTU/hr shall be exempt from the periodic testing requirements of section 5, and the monitoring requirements of section 6.

Based on this applicability, the following units are exempt from the testing and monitoring requirements of the rule.

TABLE 3A

Unit ID	DHI (mmBTU/hr)	Fuel Source
~~Boiler #7 (02B)~~	~~154.5~~	~~Natural Gas~~
~~Boiler #8 (02B)~~	~~142.1~~	~~Natural Gas~~
Boiler #9 (022)	246.1	Natural Gas
Boiler #10 (22A)	171.3	Natural Gas
Boiler #11	98	Natural Gas
Fluid Bed Incinerator #4	40	Natural Gas, Distillate Oil, Hazardous Waste

§45–2A-4. REGISTRATION

§45-2A-4.1. The owner or operator shall conduct periodic simultaneous weight emission tests of all similar fuel burning units at each source, <u>except where</u> the owner or operator registers allowable emission rates for individual stacks in accordance with subsection 4.2 of this rule.
§45-2A-4.2. In accordance with subsection 4.2 of 45CSR2, the owner or operator may register an allowable emission rate for each individual stack, in pounds per hour, determined as provided in Appendix B.

It is Bayer's understanding that many of the fuel burning units located at this facility are exempt from testing and monitoring. However, the fuel burning units are still subject to the registration requirements of §45-2A-4 which requires periodic simultaneous weight emission testing (§45-2A-4.1.) <u>or</u> the owner or operator registers allowable emission rates for individual stacks in accordance with subsection 4.2, in pounds per hour, determined as provided in App. B.

In accordance with §45-2A-4.2. attached is the registration of the allowable particulate emission rates for each individual stack in pounds per hour as determined by Appendix B. Please note that the original registration was submitted and approved in 2001

§45–2A-4. REGISTRATION

Appendix B Registration

Table 1 - Sum of Design Heat Inputs for Similar Units					
Type 'a'		Type 'b'		Type 'c'	
(A)	(B)	(C)	(D)	(E)	(F)
Unit ID	DHI	Unit ID	DHI	Unit ID	DHI
	(mmBTU/hr)		(mmBTU /hr)		(mmBTU/hr)
		~~Boiler #7 (02B)~~	~~154.5~~		
		~~Boiler #8 (02B)~~	~~142.1~~		
		Boiler #9 (022)	246.1		
		Boiler #10 (22A)	171.3		
		Boiler #11	98		
		Fluid Bed Incinerator #4	40		
Sum of DHI for all Type 'a' units	0	Sum of DHI for all Type 'a' units	~~852~~ 555.4	Sum of DHI for all Type 'a' units	0

Table 2 – Weight Emission Limits for Similar Units			
(A)	(B) Total Design Heat Input (mmBTU/hr)	(C) Factor from 45CSR2, Subsection 4.1 (lb/mmBTU)	(D) Weight Emission Rate (lb/hr)1,2
Sum of DHI for all Type 'a' units		0.05	
Sum of DHI for all Type 'b' units	~~852~~ 555.4	0.09	~~76.7~~ 50.0
Sum of DHI for all Type 'c' units		N/A, look up lb/hr limit 45CSR2, Table 45-2	

§45-2A-4. REGISTRATION

Table 3 – Registration of Standard Individual Stack Emission Rates

(A) Stack ID	(B) Sum of DHI for all units venting thru stack (mmBTU/hr)	(C) Sum of DHI for all Similar Units (Table 2, Column B (mmBTU/hr)	(D) Wt. Emission Rate for all Similar Units (Table 2, Column D) (mmBTU/hr)	(E) Stack Emission Rate (lb/hr) [(B/C)*D=E]
~~Boiler #7 (02B)~~	~~154.5~~	~~852~~	~~76.7~~	~~13.9~~
~~Boiler #8 (02B)~~	~~142.1~~	~~852~~	~~76.7~~	~~12.8~~
Boiler #9 (022)	246.1	852	76.7	22.2
Boiler #10 (22A)	171.3	852	76.7	15.4
Boiler #11	98	852	76.7	8.8
Fluid Bed Incinerator #4	40	852	76.7	3.6
Stack Allowable Emission Rate (lb/hr)				~~76.7~~ 50

§45–2A-5 Testing Requirements &
§45–2A-6 Monitoring Plan Requirements

It is Bayers understanding that all fuel burning units that do not meet the criteria of applicability in §45-2A-3 are either exempt from the rule (§45-2A-3.1.) or exempt from the testing and monitoring requirements of sections 5 and 6 (§45-2A-3.1.a., §45-2A-3.1.b.). The fuel burning units that are exempt from the requirements of §45-2A-5 and §45-2A-6 are listed in Table 2A and Table 3A.

The only fuel burning units subject to the requirements of §45-2A-5 and §45-2A-6 are listed in the following Table 4A.

TABLE 4A

Unit ID	DHI (mmBTU/hr)	Fuel Source
None		

§45–2A-5 Testing Requirements &
§45–2A-6 Monitoring Plan Requirements

Visible Emission Testing and Monitoring Plan

§45-2A-5.1.a. The owner or operator shall periodically conduct or have conducted, visible emission tests to determine the compliance of each stack with the visible emission standard set forth in section 3 of 45CSR2.

§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.

There is no fuel oil used in the boilers.

§45–2A-5 Testing Requirements &
§45–2A-6 Monitoring Plan Requirements

Weight Emission Testing and Monitoring Plan

§45-2A-5.2.a. The owner or operator shall periodically conduct or have conducted, weight emission tests to determine the compliance of each fuel stack with the weight emission standards set forth in section 4 of 45CSR2.

Fuel oil is no longer used in the boilers

§45-2A-7 Recordkeeping and Reporting Requirements

§45-2A-7.1.a. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel burning unit as specified in paragraphs 7.1.a.1 through 7.1.a.6, as applicable.

The following units will maintain records in accordance to 7.1.a.1. through 7.1.b. as it pertains to the fuel source utilized by that unit.

Table 5A

Unit ID	DHI (mmBTU/hr)	Fuel Source
~~Boiler #7 (02B)~~	~~154.5~~	~~Natural Gas~~
~~Boiler #8 (02B)~~	~~142.1~~	~~Natural Gas~~
Boiler #9 (022)	246.1	Natural Gas,
Boiler #10 (22A)	171.3	Natural Gas,
Boiler #11	98	Natural Gas
Fluid Bed Incinerator #4	40	Natural Gas, Distillate Oil, Hazardous Waste

§45-2A-7 Recordkeeping and Reporting Requirements

7.1.a.1. For fuel burning unit(s) which burn only pipeline quality natural gas, such records shall include, but not be limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis.

7.1.a.2. For fuel burning unit(s) which burn only distillate oil, such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a monthly basis and a BTU analysis for each shipment.

7.1.a.5. For fuel burning unit(s) which burn an alternate fuel(s), such records shall include, but not be limited to, the date and time of start-up and shutdown, and fuel quality analysis as approved by the Director.

7.1.a.6. For fuel burning unit(s) which burn a combination of fuels, the owner or operator shall comply with the applicable recordkeeping requirements of paragraph 7.1.a.1 through paragraph 7.1.a.5. for each fuel burned.

7.1.b. Records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings for continuous monitoring instrumentation, and copies of all required reports.

§45-2A-7 Recordkeeping and Reporting Requirements

Quarterly ***Monitoring Summary Reports*** will be maintained onsite in the attached format for each applicable unit and fuel source. Exception reporting with respect to non-COMS Based Monitoring will comply with the reporting requirements of §45-2A-7*.2.c.* through §45-2A-7*.2.d.*

§45-2A-7 Non-COMS Monitoring Summary Report

Bayer Corporation
New Martinsville, WV

Quarterly Monitoring Period Starting:_____
Quarterly Monitoring Period Ending: _____

Natural Gas

Unit	Start up / Shut Down Dates and Times	Monthly Quantity of Fuel Consumed

Distillate Oil

Unit	Start up / Shut Down Dates and Times	Monthly Quantity of Fuel Consumed

§45-2A-7 Recordkeeping and Reporting Requirements

7.2. Exception Reporting.

Exception reporting with respect to weight emission testing will comply with the requirements of reporting and testing under the Appendix of 45CSR2.

§45-2A-7.*2.a. With respect to excursions associated with measured emissions under Section 4 of 45CSR2, compliance with the reporting and testing requirements under the Appendix to 45CSR2 shall fulfill the requirement for a periodic exception report under subdivision 8.3.b of 45CSR2*.

Exception reporting with respect to non-COMS Based Monitoring will comply with the reporting requirements of §45-2A-7.*2.c. through* §45-2A-7.*2.d.*

7.2.c. Non-COMS Based Monitoring - Each owner or operator employing non-COMS based monitoring shall submit a "Monitoring Summary Report" and/or an "Excursion and Monitoring Plan Performance Report" to the Director on a semi-annual basis as part of the Title V Compliance Monitoring report.; the Director may, on a case-by-case basis, require more frequent reporting if the Director deems it necessary to accurately assess the compliance status of the fuel burning unit(s). The Monitoring Summary Report shall be in a format approved by the Director.

7.2.c.1. If the total number of excursions for the reporting period is less than one percent (1%) of the total number of readings for the reporting period and the number of readings missing for the reporting period is less than five percent (5%) of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report shall be submitted to the Director; the Excursion and Monitoring System Performance report shall be maintained on-site and shall be submitted to the Director upon request.

7.2.c.2. If the number of excursions for the reporting period is one percent (1%) or greater of the total number of readings for the reporting period or the number of readings missing for the reporting period is five percent (5%) or greater of the total number of readings agreed upon in the monitoring plan for the reporting period, the Monitoring Summary Report and the Excursion and Monitoring Plan Performance Report shall both be submitted to the Director.

§45-2A-7 Recordkeeping and Reporting Requirements

7.2.c.3. The Excursion and Monitoring Plan Performance Report shall be in a format approved by the Director and shall include, but not be limited to, the following information:

7.2.c.3.a. The magnitude of each excursion, and the date and time, including starting and ending times, of each excursion;

7.2.c.3.b. Specific identification of each excursion that occurs during start-ups, shutdowns, and malfunctions of the facility;

7.2.c.3.c. The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any);

7.2.c.3.d. The date and time identifying each period during when data is unavailable, and the reason for data unavailability and the corrective action taken; and

7.2.c.3.e. When no excursions have occurred or there were no periods of data unavailability, such information shall be stated in the report.

7.2.d. To the extent that an excursion is due to a malfunction, the reporting requirements in section 9 of 45CSR2 shall be followed.

§45-2A-7 Recordkeeping and Reporting Requirements

Non-COMS ***Excursion and Monitoring Plan Performance Reports*** will be maintained onsite in the attached format for each excursion. Exception reporting with respect to non-COMS Based Monitoring will comply with the reporting requirements of §45-2A-7.*2.c.* through §45-2A-7.*2.d.*

§45-2A-7 Excursion and Monitoring Plan Performance Report

Bayer Corporation
New Martinsville, WV

Unit:
Date of Excursion:
Start Time of Excursion:
End Time of Excursion:
Magnitude of Excursion (Opacity Readings):
Identify if excursion occurred during:

Startup:	
Shutdown:	
Malfunction:	

Identify the nature and cause of the excursion and any preventative measures adopted:
Identify any periods of time when data is not available, reason for unavailability and corrective action:

When no excursions have occurred - state it in the report!

When there are no periods of data availability - state it in the report!

APPENDIX B

Rule 10 Monitoring Plan

45 CSR 10
Registration, Monitoring and Recordkeeping Plan

Bayer MaterialScience, LLC
New Martinsville

Facility Information:

Facility Name: Bayer MaterialScience

Facility Address: Rt.2, Box 500
New Martinsville, WV 26155

Facility Environmental Contact: M. A. Henderson

Bayer, New Martinsville is a chemical manufacturing facility with the following Type 'b' combustion units discharging through individual stacks.

TABLE 1

Unit ID	DHI (mmBTU/hr)	Fuel Source
~~Boiler #7 (02B)~~	~~154.5~~	~~Natural Gas~~
~~Boiler #8 (02B)~~	~~142.1~~	~~Natural Gas~~
Boiler #9 (022)	246.1	Natural Gas
Boiler #10 (22A)	171.3	Natural Gas
Boiler #11	98	Natural Gas
Fluid Bed Incinerator #4	40	Natural Gas, Distillate Oil, Hazardous Waste
Sum of DHI for all units	~~852~~ 555.4	

All fuel burning units are Type 'b' fuel burning units as defined in 45 CSR 10 – 2.8.b.

§45 –10A-3. APPLICABILITY

§45 CSR10 3.1.a. ***Fuel burning unit(s) having a design heat input (DHI) less then ten (10) million BTU/hr are exempt.***

Based on this applicability, the following units are exempt from the rule.

TABLE 2

Unit ID	DHI (mmBTU/hr)	Fuel Source
None		

§45 CSR10 3.1.b Fuel burning unit(s) which combusts only natural gas, wood or distillate oil alone or in combination are exempt.

Based on this applicability, the following units are exempt from the rule.

TABLE 3

Unit ID	DHI (mmBTU/hr)	Fuel Source
~~Boiler #7 (02B)~~	~~154.5~~	~~Natural Gas~~
~~Boiler #8 (02B)~~	~~142.1~~	~~Natural Gas~~
Boiler #9 (022)	246.1	Natural Gas
Boiler #10 (22A)	171.3	Natural Gas
Boiler #11	98	Natural Gas

§45–10A-4. REGISTRATION

§45–10A-4 Registration of Allowable Emission Rates for Individual Stacks.

In accordance with §45–10A-4.1 the following stacks are required to be registered.

TABLE 5

Unit ID	DHI (mmBTU/hr)	Fuel Source
None		

§45–10A-4. REGISTRATION

§45 –10A-4.1 In accordance with subsection 3.4.a. of 45CSR10, the owner or operator may register an allowable emission rate for each individual stack, in pounds per hour, determined as provided in Appendix B, except where:
§45 –10A-4.1.b The Director has approved a petition for an alternative individual stack allowable emission rate.

In January 2000 Bayer signed Consent Order # CO-SIP-2000-2. Bayer understands that the S02 limits as agreed to in the consent order constitute an alternative individual stack allowable emission rate as stated in §45 –10A-4.1.b.

Consent Order # CO-SIP-2000-2 Section IV. COMPLIANCE PROGRAM states the following as it pertains to Boiler #9 (022), Boiler #10 (22A) and the Solids Incinerator #1:

1. The Company agrees that it shall not operate any source of SO_2 emissions unless such source is in compliance with the Code, terms of this consent order, and any additional or more stringent SO_2 provisions of 45 CSR 10.

2. The Company agrees that at all times, including periods of source start-up, shut down, and malfunction, that it will, to the extent possible, maintain and operate all sources of SO_2 emissions, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing such emissions.

3. Upon the effective date of this Consent Order, the Company agrees to comply with the following emission and operational limitations:

   C. SO_2 emissions from Boiler Number 9 and Boiler Number 10 shall not exceed 86 lbs./hour and 62.5 lbs./hour respectively.

      a. Sulfur content of the fuel oil burned in Boilers Number 9 and 10 shall not exceed 0.72%.

      b. Total combined fuel oil burn rate to Boilers Number 9 and 10 shall not exceed 22 gallons per minute.

   D. SO_2 emissions from Incinerator #1, Solids Incinerator, shall not exceed 9.5 lbs./hour. The unit's burners shall only fire natural gas. The unit shall only incinerate non-hazardous plant waste.

§45–10A-4. REGISTRATION

Attached is the "Registration of Alternative Stack Emission Rates" table and all other Appendix B tables which demonstrate the increased level of compliance that Consent Order # CO-SIP-2000-2 carries.

APPENDIX B REGISTRATION

Registration of Alternative Stack Emission Rates		
(A)	**(B)**	**(C)**
Stack ID	**Identify each unit venting through stack**	**Alternative Stack Emission Rate**
		(lb/hr)
None		
Sum of Alternative Stack Emission Rates (lb/hr)		

Sum of Design Heat Inputs for Similar Units					
Type 'a'		**Type 'b'**		**Type 'c'**	
(A) Unit ID	**(B) DHI (mmBTU/hr)**	**(C) Unit ID**	**(D) DHI (mmBTU/hr)**	**(E) Unit ID**	**(F) DHI (mmBTU/hr)**
Sum of DHI for all Type 'a' units	0	Sum of DHI for all Type 'b' units		Sum of DHI for all Type 'c' units	0

§45–10A-4. REGISTRATION

Weight Emission Limits for Similar Units			
(A)	(B)	(C)	(D)
	Total Design Heat Input (mmBTU/hr)	Factor from 45CSR10, Section 3 (lb/mmBTU)	Weight Emission Rate (lb/hr) [B * C = D]
Sum of DHI for all Type 'a' units	0		0
Type 'b' units	0		0
Sum of DHI for all Type 'c' units	0		0

Registration of Standard Individual Stack Emission Rates					
(A) Stack ID	(B) Identify each unit venting through stack	(C) Sum of DHI for all units venting through stack (mmBTU/hr)	(D) Sum of DHI for all similar units (mmBTU/hr)	(E) Wt. Emission rate for all similar units (lb/hr)	(F) Stack Emission Rate (lb/hr)
None					
Stack Allowable Emission Rate (lb/hr)					

§45–10A-4. REGISTRATION

§45 –10A-4.1 In accordance with subsection 3.4.a. of 45CSR10, the owner or operator may register an allowable emission rate for each individual stack, in pounds per hour, determined as provided in Appendix B, except where:
§45 –10A-4.1.a The owner or operator of a fuel burning unit utilizes CEMS or daily ASTM method sampling and analysis to demonstrate compliance with the plant-wide emission limit and the provisions of subdivision 3.4.a of 45 CSR10.

Permit R13-842 was issued to Bayer for a fluidized bed incineration system on December 9, 1986. The permit was revised on February 8, 1995 to replace a laboratory test method for S02 with a continuous S02 analyzer. In accordance with §45–10A-4.1.a. the following stack utilizes a CEM to demonstrate compliance for S02 emissions.

Table 6

Unit ID	DHI (mmBTU/hr)	Weight Emission Rate (R13-842) (lbs/hr)
Fluid Bed Incinerator	40	12.3

In January, 2000 Bayer signed Consent Order # CO-SIP-2000-2. The limits agreed to in the consent order, exceed the requirements from the original Permit R13-842 and further demonstrate Bayer's commitment to meet or exceed any requirements set forth in 45CSR10A.

Table 7

Unit ID	DHI (mmBTU/hr)	Weight Emission Rate (R13-842) (lbs/hr)
Fluid Bed Incinerator	40	7.1

Consent Order # CO-SIP-2000-2 Section IV. COMPLIANCE PROGRAM states the following as it pertains to the Fluid Bed Incinerator.

3. Upon the effective date of this Consent Order, the Company agrees to comply with the following emission and operational limitations:

   E. SO_2 emissions from Incinerator #4, Fluidized Bed Incinerator shall not exceed 7.1 lbs./hour and 28.4 tons per year.

§45–10A-5 Testing Requirements &
§45–10A-6 Monitoring Plan Requirements

§45–10A-5.1.c. The owner or operator of a fuel burning unit may petition for alternatives to the testing requirements of subsection 5.1 for units that are infrequently used or for infrequently used fuels.

§45–10A-5 Testing Requirements &
§45–10A-6 Monitoring Plan Requirements

§45–10A-5.4. The owner or operator of a fuel burning unit employing CEMS to meet the requirements of section 6 shall be exempt from the testing requirements of subsections 5.1,5.2,and 5.3.

B. Fluid Bed Incinerator

In January, 2000 Bayer signed Consent Order # CO-SIP-2000-2. Section V. COMPLIANCE TESTING AND MONITORING REQUIREMENTS states the following as it pertains to the Fluid Bed Incinerator.

5. Compliance with the sulfur dioxide emissions limits established in Section IV.3.E. Fluidized Bed Incinerator, shall be demonstrated by a Continuous Emission Monitoring (CEM) program as required by R13-842.

§45–10A-7 Recordkeeping and Reporting Requirements

A. Boiler #9 (022), Boiler #10 (22A), Solids Incinerator #1
B. Fluid Bed Incinerator #4

In accordance with the RECORDKEEPING, NOTICES AND REPORTING Requirements of CO-SIP-2000-2. Section VI., Bayer Corporation will submit quarterly analyzer summary reports for sulfur dioxide per Conditions B.7 and B.8 of Permit R13-842 (as modified February 8, 1995), for the Fluidized Bed Incinerator. This will be completed in accordance with 40 CFR 60.7. Also included will be a description of any changes made since the last quarter in the continuous emissions monitoring system process or controls. This report will be due no later than fifteen (15) days following the end of the previous quarter.

Also, in January, 2000 Bayer signed Consent Order # CO-SIP-2000-2. Section VI. RECORDKEEPING, NOTICES AND REPORTING which states the following as it pertains to Boiler #9 (022), Boiler #10 (22A), Solids Incinerator #1 and the Fluid Bed Incinerator.

1. When demonstrating compliance using a reference test method under 40 CFR part 60, Appendix A, the Company 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 Director shall be provided written notice of the actual test dates after approval of the test protocol, but not less than fifteen (15) days prior to the first date of testing.

2. The Company shall maintain records of the date, time and duration and magnitude of emissions of any malfunction in the operation of sources subject to this Consent Order, any malfunction of air pollution control equipment or any periods during which a control device was inoperative.

3. 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 SO_2 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;

§45–10A-7 Recordkeeping and Reporting Requirements

C. An estimate of the total amount of excess emissions discharged during the malfunction period;

D. The maximum emission rate 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 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.

4. All data and information required to be recorded or obtained under the terms of this Consent Order 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 this Consent Order or made available to the Director upon his or her request or during any facility inspection by an authorized representative of the Director.

5. All reports required to be submitted to the Director under the terms of this Consent Order shall be certified by a responsible official of the Company. This certification shall state that, based on information and belief formed by reasonable inquiry, the statements and information in the document are true, accurate and complete.

Appendix C

CERTIFICATION OF DATA ACCURACY

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

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.