

OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation #26:

Permit #: 1085-AOP-R0

IS ISSUED TO:

Eastman Chemical Company, Arkansas Eastman Division
2800 Gap Road
Batesville, AR 72503
Independence County
CSN: 32-0036

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

and

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date

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SECTION I: FACILITY INFORMATION

PERMITTEE: Eastman Chemical Company,
Arkansas Eastman Division

CSN: 320036
PERMIT NUMBER: 1085-AOP-R0

FACILITY ADDRESS: 2800 Gap Road

COUNTY: Independence

CONTACT POSITION: J. W. Ross
TELEPHONE NUMBER: 501-698-1811

REVIEWING ENGINEERS: Shane Byrum
Lyndon Poole

UTM North-South (X): 3953.5 km
UTM East-West (Y): 633.5 km
Zone 15

SECTION II: INTRODUCTION

Arkansas Eastman Division of Eastman Chemical Company, located in Batesville, Arkansas, is a world-class supplier of speciality organic chemical intermediates used in the manufacture of color film and photographic paper, paints and coatings, plastics and bottle polymers, medical supplies, prescription medicines, food supplements, household detergents, and agricultural products.

Summary of Permit Activity

This permit (1085-AOP-R0) is being issued in order to satisfy the requirements of Title V of the Clean Air Act. This permit also incorporates the requirements of 40 CFR Part 60, Subpart EEE, *National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors*, promulgated on September 30, 1999.

This permit also consolidates the following de minimis permit modifications, previously approved by the Department:

- 1) Authorization to burn wood chips in the three coal-fired boilers. This project required the installation of an unloading and conveying system to introduce the wood chips into the flame zone of the coal-fired boilers. This modification did not require an increase in permitted boiler emissions.
- 2) Installation of a system of tanks, strippers, dryers, and distillation columns necessary to recover dimethyl sulfoxide (DMSO) from a wastewater stream that was previously routed to the chemical incinerator. Small increases in VOC emissions resulted from tank breathing and working losses, and from fugitive losses from associated equipment.
- 3) Incorporation of a project to collect and reduce the accumulation of process dust within the organic sulfonate manufacturing area. This permit modification required the installation of a continuous dust collection system and central vacuum cleaning system. This modification involved a particulate increase of 8.5 ton/yr.
- 4) Installation of a small-scale laboratory for research and development activities (Kilo Lab). This action introduced 1.5 ton/yr of new VOC emissions.
- 5) Re-routing of emissions from 23 tanks to the Regenerative Thermal Oxidizer (RTO). Resultant VOC increases at the RTO totaled 0.5 ton/yr.
- 6) Replacement of three waste storage tanks. No emission increases were required.
- 7) Replacement of two waste storage tanks. No emission increases were required.

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- 8) Re-routing of three distillation column vents to the Regenerative Thermal Oxidizer (RTO) control system for the purpose of odor abatement. VOC emissions at the RTO increased by 0.33 ton/yr, but the Solvent Recovery VOC emissions were reduced by 5.74 ton/yr.

Regulations

Operations at this facility are subject to regulation under the following:

- C *Arkansas Air Pollution Control Code* (Regulation 18)
- C *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19)
- C *Regulations of the Arkansas Operating Air Permit Program* (Regulation 26)
- C *New Source Performance Standards* (NSPS, 40 CFR, Part 60)
- C *National Emission Standards for Hazardous Air Pollutants* (NESHAP, 40 CFR, Parts 61 and 63)

Eastman Chemical is also classified as a major stationary source as defined by 40 CFR 52.21, *Prevention of Significant Deterioration of Air Quality* (PSD). This permitting action, however, does not require PSD review, because the actual emission increases resulting from separate modifications consolidated into this permit do not exceed the PSD significant increase thresholds.

Emission Summary

A summary of facility-wide emissions is provided in the following table. Specific emission unit information is located by the indicated cross-reference pages.

EMISSION SUMMARY						
PES #	ARK ID#	Description	Pollutant	Emission Rates		Cross Reference Page
				lb/hr	tpy	
		Total Allowable Emissions	PM ₁₀	84.5	340.3	-
			SO ₂	1,440.2	6,308.1	
			VOC	173.5	715.2	
			CO	422.3	1,849.7	
			NO _x	179.9	787.8	
			Inorganics*	214.6	940.0	
			Total HAPs**	227.5	996.6	

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EMISSION SUMMARY						
PES #	ARK ID#	Description	Pollutant	Emission Rates		Cross Reference Page
				lb/hr	tpy	
Organic Chemical Intermediates						
5N09- 01	Regenerative Thermal Oxidizers (2 Units)	PM ₁₀	3.5	15.3	15	
		SO ₂	8.4	36.8		
		VOC	42.1	184.1		
		CO	5.3	23.2		
		NO _x	8.7	38.1		
		Inorganics*	10.0	43.8		
		Total HAPs**	10.0	43.8		
OCI-FUG	Organic Chemical Intermediates Fugitive Emissions	VOC	3.3	14.3	15	
Utilities						
6M01	Coal Pile	PM ₁₀	0.02	0.1	17	
6M01-01	3 Coal Fired Boilers (70 MMBtu/hr each)	PM ₁₀	46.9	205.3	17	
		SO ₂	1,418.7	6,213.8		
		VOC	0.5	2.3		
		CO	384.4	1,683.7		
		NO _x	111.5	488.2		
		Inorganics*	200.4	877.9		
		Total HAPs**	200.4	877.9		
6M01-01A	Coal Bunker Fabric Filter	PM ₁₀	0.2	0.7	17	
6M06-01	#4 Boiler (78 MMBtu/hr) Natural Gas	PM ₁₀	1.1	4.8	17	
		SO ₂	1.2	5.3		
		VOC	0.5	2.0		
		CO	2.8	12.3		
		NO _x	13.3	58.3		

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EMISSION SUMMARY						
PES #	ARK ID#	Description	Pollutant	Emission Rates		Cross Reference Page
				lb/hr	tpy	
6M07-01		#5 Boiler (221 MMBtu/hr) Natural Gas	PM ₁₀	1.1	4.9	17
			SO ₂	0.1	0.6	
			VOC	2.9	12.7	
			CO	18.0	78.8	
			NO _x	22.0	96.4	
Organic Sulfonation						
5M01-01	SPS-S-01	Scrubber	VOC	0.1	0.4	26
5M01-02	SPS-VE-03	Scrubber	VOC	0.1	0.4	26
5M01-05	PROD-VE-04	Scrubber	VOC	0.1	0.4	26
5M01-06	SPS-S-02	Scrubber	VOC	0.5	1.8	26
5M01-07	PROD-VE-05	Scrubber	VOC	0.1	0.4	26
5M01-08	EX-VE-01	Scrubber	VOC	0.1	0.4	26
5M01-09	SPS-S-03	Scrubber	VOC	0.2	0.9	26
5M01-10	Project cancelled. Unit not installed.					
5M03-01	PROD-VE-02	Scrubber	VOC	0.1	0.4	26
5M03-02	SPS-VE-01	Scrubber	VOC	0.2	0.8	26
5M04-01	SPS-VE-02	Scrubber	VOC	0.6	2.3	26
5M04-02	PROD-VE-01	Scrubber	VOC	0.2	0.7	26
5M04-10	SPS-VE-04	Scrubber	SO ₂	0.1	0.4	26
5M05-01	PROD-VE-03	Scrubber	VOC	0.1	0.4	26
5M05-02	EX-C-20	Filter	PM ₁₀	0.1	0.4	26
5M11-01	SPS-S-201	Scrubber	VOC	0.1	0.4	26
5M11-04	PROD-VE-304	Scrubber	VOC	0.1	0.4	26
5M11-05	SPS-S-202	Scrubber	VOC	0.1	0.4	26
5M11-06	PROD-VE-305	Scrubber	VOC	0.1	0.4	26
5M11-07	EX-VE-401	Scrubber	VOC	0.1	0.4	26

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PES #	ARK ID#	Description	Pollutant	Emission Rates		Cross Reference Page
				lb/hr	tpy	
5M11-08	SER-VE-501	Scrubber	PM ₁₀	1.1	4.7	26
5M11-09	SER-VE-502	Filter	PM ₁₀	1.1	0.9	26
5M11-15	SPS Supersack Load Hopper Dust Control System		PM ₁₀	0.1	0.3	26
5M11-16	Project cancelled. Unit not installed.					
5M13-01	PROD-VE-302	Scrubber	VOC	0.1	0.4	26
5M16-01	Supersack Loadout Dust Control System		PM ₁₀	0.1	0.4	26
5M18-01	SER-VE-01	Continuous Dust Control System	PM ₁₀	0.9	3.9	26
5M18-02	SER-VE-02	Central Vacuum Cleaning System	PM ₁₀	3.4	3.7	26
5M18-03	SER-VE-03	Bin Vacuum Cleaning System	PM ₁₀	0.3	0.9	26
5MNOBS-TNK	Aggregate Tank (4 tanks)		VOC	0.4	1.8	26
NOBS-FUG	Fugitive Emissions from Organic Sulfonation Process		VOC	6.2	27.0	26
5M01-TSP	Dust Control Maintenance Fugitives		PM ₁₀	3.1	0.1	26
Chemical Destructor						
6M03-05	Chemical Waste Destructor (50 MMBtu/hr)		PM ₁₀	20.0	87.6	31
			SO ₂	11.6	50.8	
			VOC	2.4	10.5	
			CO	11.4	49.9	
			NO _x	23.0	100.7	
			Inorganics*	4.0	17.5	
			Total HAPs**	6.9	30.3	
DEST-FUG	Destructor Fugitives		VOC	1.2	5.1	31
Solvent Recovery						

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PES #	ARK ID#	Description	Pollutant	Emission Rates		Cross Reference Page
				lb/hr	tpy	
4PSR-00	Solvent Recovery Facility		VOC	27.8	79.0	48
SR-FUG	Solvent Recovery Fugitive Emissions		VOC	12.7	55.6	48
Waste Water Treatment						
7K01-01	Wastewater Treatment System		VOC	45.7	200.0	50
			Total HAPs**	10.0	43.8	
7M01-02	EQ-C-05	Wastewater Decant Tank	VOC	0.8	3.5	50
7M01-04	EQ-C-04	Chemical Dumpster at Wastewater Treatment Plant	Insignificant activity.			
Polymer Production						
5NPOLY-TNK	Tank Bubble (4 Tanks at Polymer Production)		VOC	4.7	20.6	51
POLY-FUG	Fugitive Emissions from Polymer Production		VOC	1.8	7.8	51
Isopropyl Benzene						
5NDIPB-TNK	Tank Bubble (8 tanks)		VOC	0.5	2.2	52
5N03-48	D-10	Scrubber	Inorganics*	0.1	0.4	52
			Total HAPs**	0.1	0.4	52
5N03-52	T-251	Tank	VOC	0.4	1.8	52

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EMISSION SUMMARY						
PES #	ARK ID#	Description	Pollutant	Emission Rates		Cross Reference Page
				lb/hr	tpy	
5N03-54		Flare	PM ₁₀	0.1	0.4	52
			SO ₂	0.1	0.4	
			VOC	0.9	3.9	
			CO	0.4	1.8	
			NO _x	1.4	6.1	
5N03-55	D-270	Scrubber	Inorganics*	0.1	0.4	52
			Total HAPs**	0.1	0.4	
5Q94-01	T-241	Tank	VOC	0.4	1.8	52
DIPB-FUG	Fugitive Emissions from Isopropyl Benzene Process		VOC	5.7	25.0	52
Kilo Lab (Research and Development)						
4P03-05	Kilo Lab Hood		Insignificant activity.			
Storage Tanks and Miscellaneous Sources						
5N03TK-01	Process Tanks (35 Tanks)		VOC	8.0	35.0	58
6N01-02	Diesel	Tank	VOC	0.1	0.4	
6N01-03	Gasoline	Tank	VOC	1.4	6.0	
7N02-01	Cement Plant Fabric Filter		PM ₁₀	0.3	1.3	
Acrylic Resins Process						
5N07-06	Acrylic Resin Bagging System		PM ₁₀	0.09	0.40	61
5N07-FUG	Acrylic Resin Fugitives		PM ₁₀ VOC	0.13 0.27	0.58 1.17	

Notes: The ARK ID# is for Arkansas Eastman use only.
Ton/yr limits are listed for individual sources for informational purposes only. The facility shall show compliance with the facility total ton/yr limits presented at the top of this table using the procedures outlined in Plantwide Conditions 8 through 12.
*Inorganics are considered to be non-VOC Hazardous Air Pollutants.
**Hazardous Air Pollutants include all compounds so designated by Section 112(b)(1) of the Clean Air Act.
Plantwide Hazardous Air Pollutant emissions are limited in Plantwide Conditions 8, 10 and 11.

SECTION III: PERMIT HISTORY

Permit 262-A was issued to Arkansas Eastman in December of 1974 for the installation of a facility to manufacture various specialty and organic intermediate chemicals through batch operations. Three 70 MM Btu/hr coal-fired boilers were installed to provide steam for the processes.

Permit 262-AR-1 was issued in 1976. This permit recognized suspension of construction plans for the hydroquinone plant, authorized a higher number of reactors for the chemical intermediates plant, acknowledged the use of ESPs for control of boiler emissions, and permitted the chemical destructor at 9 pounds of particulate per hour.

Permit 487-A was issued in 1978. This permit allowed the facility to add 8 batch reactors and 10 storage tanks. Each of the reactors were vented through a caustic scrubber. The particulate emissions were routed through fabric filters.

Permit 262-AR-2 was issued in 1978. This permit authorized an expansion of the chemical products and intermediates. Emission control was provided by caustic and water scrubbers. The permit required the facility to develop an ambient air monitoring program in order to evaluate emission concentrations beyond the property line.

Permit 262-AR-3 was issued on July 25, 1980. This permit approved an expansion in production to allow a greater variety and larger quantity of chemicals. New process equipment included reactors, filters, dryers, distillation columns, and storage tanks. Emission control equipment included scrubbers using sodium hydroxide or water. The permit also allowed the installation of a new coal fired boiler (193 MM Btu/hr). The coal boiler utilized an ESP for particulate control, and the boiler was limited to coal at or below 1 percent sulfur, and a heat content of 12,500 Btu per pound. This permitting action required PSD review.

Permit PSD-AR-311 was issued by the U.S. Environmental Protection Agency on March 27, 1981. This was a PSD permit which addressed the installation and operation of (coal-fired) Boiler #4 and the associated coal handling system. The permit imposed a coal sulfur limit of 1 percent by weight and an ash content of 20 percent by weight. The permit also specified limits on throughput, opacity, emissions, monitoring, and stack testing for the new boiler.

Permit 262-AR-4 was issued on September 25, 1981. This permit allowed the installation of additional process equipment and a coal fired boiler. The permit also authorized cessation of certain continuous monitoring equipment, subsequent to the demonstration that criteria pollutant concentrations were well below the NAAQS.

Permit 262-AR-5 was issued on July 23, 1982. This permit authorized an increase in sulfur content of the coal fueling the coal boilers. The sulfur limit was raised from 1 to 4 percent. Upon evaluation of emission increases and dispersion modeling, this permitting action did not

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require PSD review.

Permit 262-AR-6 was issued on March 21, 1986. This permit authorized the installation and operation of an oxidized cellulose facility. Emission control was provided by a packed column scrubber using sodium hydroxide.

Permit 744-A was issued on November 5, 1984. This permit was issued to allow the operation of a new isopropylbenzene production process. Emission control included a fabric filter and a water scrubber for the catalyst storage and transfer system. Reaction and refining emissions were routed to the boilers.

Permit 829-A was issued on July 14, 1987. This permit authorized the installation and operation of one 78 MMBtu/hr steam boiler. Nitrogen oxides emissions from this boiler were estimated at above the 40 ton/yr Prevention of Significant Deterioration (PSD) threshold, and the permit application was therefore required to undergo PSD review. The BACT analysis found that emissions controlled by either staged combustion/low excess air burners or flue gas recirculation would not substantially improve ambient air quality and were not economically feasible. No additional controls were therefore required, and standard-register burners were approved for use.

Permit 981-A was issued on February 20, 1990. This permit was issued to allow the operation of a new polymer production facility. Emissions were controlled by conservation vents on the tanks and 2-stage scrubbers on the centrifuges, reactors, and distillation columns.

Permit 268-I was issued on March 25, 1976 in order to permit the facility's incinerator.

Permit 1085-A was issued on January 11, 1991. This permit was issued to modernize some of the older permits and to put all of the company's permits into one package. This permit also required Eastman to install and operate a Regenerative Thermal Oxidizer (RTO) on the batch organic chemicals production facilities in buildings 5N01 and 5N03 for the control of VOC emissions by July, 1992.

Permit 1085-AR-1 was issued on May 14, 1992. This permit involved the installation of a 221 MMBtu/hr natural gas fired boiler (6M-07-01), which required a PSD permit due to significant nitrogen oxide emissions (98 tons per year).

Permit 1085-AR-2 was issued on February 9, 1994. This permit was issued to document the burning of wastewater sludge in all three of the coal fired boilers at the facility. Eastman proposed to dewater wastewater treatment plant sludge before atomizing it using compressed air, into the high temperature combustion zone of the boilers.

Permit 1085-AR-3 was issued on April 18, 1994. The modification involved the addition of a packed-bed water scrubber to source 5N01-45, a 24,000 gallon above-ground storage tank which stores crotonaldehyde. This was an uncontrolled source prior to this minor permit modification.

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Potential emissions from this source were calculated to be 5.7 tons per year after the controls.

Permit 1085-AR-4 was issued on October 20, 1994. This permit involved venting several temporary storage tanks to the RTOs. The main purpose for this modification was to control the odor generated from the use of ethyl mercaptan, which is mainly used to odorize natural gas. The following tanks were vented to the RTO: 5N01-11, 5N01-12, 5N01-13, 5N01-14, 5N01-16, 5N01-19, 5N01-20, 5N01-21, 5N01-29, 5N01-30, 5N01-34, 5N01-35, 5N01-36, 5N01-37, 5N01-50, 5N01-51, 5N01-52, 5N01-53, 5N01-60, 5N01-62, 5N03-09, 5N03-10, and 5N03-61.

Permit 1085-AR-5 was issued on October 18, 1994. This was a minor modification for producing a new polymer in the Polymer Production Facility. Emissions from this modification were controlled by the RTOs, scrubbers, and conservation vents on tanks.

Permit 1085-AR-6 was issued on June 6, 1995. This modification involved modifying existing solvent recovery equipment used to recover additional solvent and to remove potential odor producing compounds by destroying them in the existing RTOs. The main purpose of this modification was to control the odor generated from the use of ethyl mercaptan. Ethyl mercaptan is mainly used to odorize natural gas. The odor threshold of ethyl mercaptan is 0.4 ppb. To eliminate this odor, the facility proposed that the scrubber atmospheric vents be connected to the RTOs. Additionally, the permittee proposed to modify the existing wastewater treatment system by closing the existing equalization basin, discontinuing the use of the existing diversion basin for processing wastewater, and constructing aboveground tanks for equalization/neutralization and diversion of the wastewater. The system modification included the addition of two 30,000 gallon pump station clearwells, two 750,000 gallon equalization tanks, and one 1,000,000 gallon diversion tank. Also a new lift station, neutralization system, and a floating organic skimmer and decant system was to be provided. The existing diversion basin was to be used to capture noncontact cooling water and storm water runoff should it become contaminated.

Permit 1085-AR-7 was issued on November 27, 1995. This permit was issued to raise the particulate emission limit on the RTOs.

Permit 1085-AR-8 was issued on May 8, 1996. This permit covered routing emissions from eleven waste storage tanks to the coal-fired boilers to abate odors within the utilities area of the plant, to burn waste solvent fuel in the boilers at the rates certified under the Boiler and Industrial Furnace regulation (BIF), to increase the rate of rubber and paper pellet fuel burning to 100% of the total heat input of the coal-fired boilers, and to construct one 20,000 gallon storage tank containing a final polymer product.

Permit 1085-AR-9 was issued on November 12, 1996. This permit involved increasing potential VOC emission from the Waste Chemical Destructor from 0.5 tpy to 8.8 tpy due to an anticipated future increase in business and a corresponding increase in the amount of wastes that could potentially be generated; and to increase potential inorganic emissions from 16.3 tpy to 43.8 tpy

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from the two RTOs due to an anticipated increase in chlorinated compounds production.

Permit 1085-AR-10 was issued on March 11, 1997. This permit involved the construction and operation of a new building to house a continuous dust collection system and central vacuum cleaning system. Five additional emission points discharging from venturi scrubbers and fabric filters, and an emission point designating fugitive emission from maintenance activities, were created with the startup of this dust collection and vacuum cleaning system. This permit also allowed the organic sulfonation facility to produce alternative products which required minor changes in the process chemistry to meet new markets. Eight new emission points were created with this modification.

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SECTION IV: EMISSION UNIT INFORMATION

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Organic Chemical Intermediates: 5N09-01, OCI-FUG

Process Description

Arkansas Eastman's batch organic chemical intermediates facilities are located in Buildings 5N01, 5N03, and 5N07. These production buildings contain multi-purpose/product equipment which may produce a variety of chemicals. The contained or captured vapors from the equipment in both batch production buildings are vented through a collection system to the RTO units via a common duct. Volatile organic compounds (VOCs) are destroyed by combustion.

The two RTOs are designated by source number 5N09-01. Fugitive emissions from organic chemical intermediates are designated as source number OCI-FUG.

Specific Conditions

1. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. The lb/hr rates are based on maximum measured test data.

PES #	Description	Pollutant	lb/hr
5N09-01	Regenerative Thermal Oxidizer (2 Units)	PM ₁₀	3.5
		SO ₂	8.4
		VOC	42.1
		CO	5.3
		NO _x	8.7
OCI-FUG	Fugitives	VOC	3.3

2. Pursuant to §18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, permittee shall not exceed the emission rates set forth in the following table. The lb/hr rates are based on maximum measured test data.

PES #	Description	Pollutant	lb/hr
5N09-01	Regenerative Thermal Oxidizer (2 Units)	Inorganics*	10.0
		PM	3.5
		Total HAPs**	10.01

*Inorganics are considered to be non-VOC Hazardous Air Pollutants.

**Hazardous Air Pollutants include all compounds so designated by Section 112(b)(1) of the Clean Air Act.

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Plantwide Hazardous Air Pollutant emissions are limited in Plantwide Conditions 8, 10 and 11.

3. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52 Subpart E, the permittee shall perform testing of 5N09-01 (RTO) within 120 days of permit issuance for SO₂, VOC, CO, and NO_x, using Methods 6C, 25A, 10, and 7E, respectively. The VOC destruction efficiency shall be determined during the Method 25A testing. Subsequent testing shall be performed every five (5) years to coincide with the renewal of the permit. Testing at 5N09-01 shall conform with the requirements of Plantwide Conditions 3 and 4.
4. Pursuant to §19.503 of Regulation 19, and 40 CFR Part 52 Subpart E, the permittee shall not exceed 20% opacity as measured by Method 9 at 5N09-01 (RTOs) during normal operations.
5. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52, Subpart E, if visible emissions in excess of 20% are detected from 5N09-01 (RTO), then the permittee will conduct corrective action. The results of these observations and corrective action shall be kept on site and made available for inspection upon request. Opacity reading will be conducted in accordance with the Facility Operating Plan dated February 21, 2002. Opacity observations at the RTOs shall not be required during times when the RTOs are being “baked out.”
6. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52 Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall continuously monitor and record the temperature in the combustion chamber of the RTOs during normal operations.
7. Pursuant to §19.303 of Regulation 19, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain the temperature in the combustion chamber of the RTOs during normal operations as outlined in the Facility Operating Plan dated February 21, 2002.

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Utilities Section: 6M01, 6M01-01, 6M01-01A, 6M06-01, 6M07-01

Process Description

There are three coal fired (6M01-01) and two natural gas fired boilers (6M06-01 and 6M07-01) at the facility. The 3 coal fired boilers are balanced draft, coal-fired steam generation boilers that have been fitted with atomizing nozzles to facilitate burning of liquid chemical wastes.

Each coal fired boiler system is designed as a 70 million Btu/hr unit and is equipped with its own electrostatic precipitator (ESP) to control particulate emissions. The three coal fired boilers share a common primary fuel conveying system, a common ash handling system, and a common 200 foot tall stack. The boilers are independently controlled by a Distributed Control System (DCS). All interactions from the operator to the burners are made through this computer system.

There are two natural gas fired boilers at the facility. The #4 boiler (6M06-01) burns natural gas at 78 million BTU/hr. The #5 boiler (6M07-01) burns natural gas at 221 million BTU/hr. Each boiler system consists of a water tube boiler, economizer, superheater and a stack.

The following sections of Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60, were evaluated for the boilers at the facility:

- C **NSPS Subpart D (Steam Generating Units):** This regulation applies to coal fired or natural gas fired boilers that are rated above 250×10^6 Btu/hr heat input.
- C **NSPS Subpart Db (Steam Generating Units):** This regulation applies to boilers of greater than 100×10^6 Btu/hr input constructed, reconstructed, or modified after 6/18/84.
- C **NSPS Subpart Dc (Small Steam Generating Units):** This regulation applies to boilers with heat inputs of $10 - 100 \times 10^6$ Btu/hr constructed, reconstructed, or modified after 6/9/89.

The three coal fired boilers were installed in 1975, and are rated for 70 million Btu/hr per unit. Due to size and installation date, these boilers are not subject to any of the above mentioned NSPS Subparts.

The #4 boiler was installed in 1986 and is rated for 78 million Btu/hr. The #5 boiler was installed in 1993 and is rated for 221 million Btu/hr. Due to size and installation date the #4 boiler is not subject to these NSPS Subparts. However, the #5 boiler is subject to NSPS Subpart Db. Only the requirements as pertaining to NO_x are applicable to the #5 boiler since it combusts only natural gas.

Both the #4 (6M06-01) and #5 (6M07-01) natural gas fired boilers are subject to PSD emissions

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limitations. The applicable requirements for the #4 and #5 boilers are discussed below.

- Boiler #4. This boiler is subject to a PSD emission rate limitation for NO_x which is simply 13.3 lb/hr. BACT for NO_x at the time of permit issuance was considered to be a standard register burner.
- Boiler #5. This boiler is subject to both PSD and NSPS Subpart Db requirements. The PSD BACT limit for NO_x is 22 lb/hr (0.1 lb/million Btu), which is more stringent than the NSPS emissions standard for NO_x (0.2 lb/million Btu).

The following sections of Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60, were evaluated for the Utilities Section waste storage tanks at the facility:

- C **NSPS Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels):** NSPS Kb requirements are identified and addressed in the Plantwide Conditions of this permit for all facility storage vessels. Emissions from utilities waste chemical storage tanks are routed through a closed-vent system to three coal-fired boilers as control devices.

Specific Conditions

8. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr	tpy
6M01-01	3 Coal Fired Boilers (70 MMBtu/hr each)	PM ₁₀	46.9	205.3
		SO ₂	1,418.7	6,213.8
		VOC	0.5	2.3
		CO	384.4	1,683.7
		NO _x	111.5	488.2
6M01	Coal Pile	PM ₁₀	0.10	0.1
6M01-01A	Coal Bunker Fabric Filter	PM ₁₀	0.2	0.7
6M06-01	#4 Boiler (78 MMBtu/hr)	PM ₁₀	1.1	4.8
		SO ₂	1.2	5.3

Natural Gas

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PES #	Description	Pollutant	lb/hr	tpy
		VOC	0.5	2.0
		CO	2.8	12.3
		NO _x	13.3*	58.3
6M07-01	#5 Boiler (221 MMBtu/hr) Natural Gas	PM ₁₀	1.1	4.9
		SO ₂	0.1	0.6
		VOC	2.9	12.7
		CO	18.0	78.8
		NO _x	22.0*	96.4

*PSD limits.

9. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates presented in the following table.

PES #	Description	Pollutant	lb/hr	tpy
6M01-01	3 Coal Fired Boilers (70 MMBtu/hr each)	PM	46.9	205.3
		Inorganics*	200.4	877.9
		Total HAPs**	200.4	877.9
6M01	Coal Pile	PM	0.10	0.1
6M01-01A	Coal Bunker Fabric Filter	PM	0.2	0.7
6M06-01	#4 Boiler (78 MMBtu/hr) Natural Gas	PM	1.1	4.8

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PES #	Description	Pollutant	lb/hr	tpy
6M07-01	#5 Boiler (221 MMBtu/hr) Natural Gas	PM	1.1	4.9

*Inorganics are considered to be non-VOC Hazardous Air Pollutants.

**Hazardous Air Pollutants include all compounds so designated by Section 112(b)(1) of the Clean Air Act. Plantwide Hazardous Air Pollutant emissions are limited in Plantwide Conditions 8, 10 and 11.

10. Pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity at 6M01-01(Coal Fired Boilers), except during periods of startup, shutdown, and malfunction. Compliance with this condition shall be demonstrated through operating the ESP as specified by the manufacturer, and as outlined in the Facility Operating Plan dated February 21, 2002.
11. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain the power input to the ESP (6M01-01 - Coal Fired Boilers) as outlined in the Facility Operating Plan dated February 21, 2002.
12. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall maintain daily records of the power input at the ESP (6M01-01 - Coal Fired Boilers).
13. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain compliance with the VOC, SO₂, NO_x, CO and inorganic emission limits of 6M01-01 (Coal Fired Boilers) per the methodology outlined in the Facility Operating Plan dated February 21, 2002.
14. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, the permittee shall not combust coal with a sulfur content greater than 3.5% by weight.
15. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall record the amount and type of coal, biosludge, liquids, and rubber fed to the coal fired boilers (6M01-01 - Coal Fired Boilers) during a 30 day period. These records shall be kept on site and made available upon request.
16. Pursuant to §19.702 of Regulation 19 and 40 CFR Part 52 Subpart E, the permittee shall perform testing of 6M01-01 (Coal Fired Boilers) within 180 days of permit issuance for NO_x, using EPA Reference Method 7E. This testing shall conform with the requirements

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of Plantwide Conditions 3 and 4.

17. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, the permittee may burn scrap rubber as long as the sulfur content of the rubber does not exceed 4% by weight.
18. Pursuant to §18.1002 of Regulation 18, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, rubber scrap shall not exceed 50% of the total heat input to the boilers while burning hazardous waste authorized by applicable Resource Conservation and Recovery Act (RCRA) regulations.
19. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, the permittee shall track natural gas usage in the #4 Boiler (6M06-01) as outlined in the Facility Operating Plan dated February 21, 2002.
20. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part §60.48b(g)(2), the permittee shall use a predictive emission monitoring system (PEMS) to monitor NO_x emissions from the #5 Boiler (6M07-01) as outlined in the Facility Operating Plan dated February 21, 2002.
21. Pursuant to §18.501 of the Arkansas Air Pollution Control Code (Regulation 18), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed 5% opacity over a three (3) hour period at 6M01-01A (Coal Bunker Fabric Filter) or 6M06-01 (#4 Boiler). Compliance with this opacity limit shall be demonstrated by complying with Specific Condition 22, 23, and 24.
22. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall combust only pipeline quality natural gas in 6M06-01 and 6M07-01.
23. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall maintain the pressure drop across the fabric filter at 6M01-01A as outlined in the Facility Operating Plan February 21, 2002.
24. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall keep records on site of the pressure drop across 6M01-01A.
25. Pursuant to 40 CFR Part §60.44b(a)(1)(ii), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the permittee is to comply with the following nitrogen oxides emission limitation (expressed as NO₂) at SN-6M07-01: The NO₂ limitation is 0.20 lb/MMBtu based on a high heat release rate.

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26. Pursuant to 40 CFR Part §60.44b(h), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the nitrogen oxide standard at SN-6M07-01 applies at all times including periods of startup, shutdown, or malfunction.
27. Pursuant to 40 CFR Part §60.44b(i)-(j), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, compliance with the emission limitations at SN-6M07-01 is determined on a 30-day rolling average basis.
28. Pursuant to 40 CFR Part §60.46b(a), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the permittee is limited to an opacity at SN-6M07-01 of 20%. This limit shall apply at all times except periods of startup, shutdown, or malfunction.
29. Pursuant to 40 CFR Part §60.46b(e), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the permittee shall use a continuous parametric monitoring system (PEMS) at SN-6M07-01 to determine compliance with monitoring nitrogen oxides under §60.48b.
30. Pursuant to 40 CFR Part §60.48b(g)(2), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the permittee shall monitor steam generating unit operating conditions at SN-6M07-01 and predict nitrogen oxides emission rates as specified in a plan submitted pursuant to §60.49(c).
31. Pursuant to 40 CFR Part §60.49b(c), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the permittee shall comply with all provisions of this citation for monitoring steam generating unit operating conditions at SN-6M07-01 under §60.48b(g)(2).
32. Pursuant to 40 CFR Part §60.49b(d), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the permittee shall record and maintain records of amounts of natural gas combusted at SN-6M07-01 each day and calculate the annual capacity factor for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
33. Pursuant to 40 CFR Part §60.49b(g), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the permittee shall maintain and record at SN-6M07-01, for each steam generating unit operating day, the information required by §60.49b(g).
34. Pursuant to 40 CFR Part §60.49b(h), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the permittee shall submit

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excess emission reports for any excess emission which occur at SN-6M07-01 during the reporting period.

35. Pursuant to 40 CFR Part §60.49b(w), Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, the reporting period for the reports required at SN-6M07-01 under this subpart is each 6-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.
36. Pursuant to 40 CFR §63.683(b)(1), Off-Site Waste and Recovery Operation MACT, the permittee shall comply with any of the requirements specified in 40 CFR §63.683(b)(1) for Off-site Material Management Units within an affected source designation under 40 CFR §60.680(c). Specific units identified as applicable under this regulation include the following liquid waste storage tanks:

WB-01, WB-02, WB-03, WB-04, WB-05, WB-06, WB-07, WB-08, WB-09, WDT-01, and WDT-02 (These tanks are routed through the coal-fired boilers via a closed-vent vapor recovery system.)
37. Pursuant to 40 CFR §63.683(b)(2), Off-Site Waste and Recovery Operation MACT, the permittee is exempt from those off-site material management units identified in 40 CFR §63.683(b)(2).
38. Pursuant to 40 CFR §63.683(b)(1)(i), Off-Site Waste and Recovery Operation MACT, the permittee controls air emissions from off-site material management units in accordance with the applicable standards specified in 40 CFR §63.685 through §63.689.
39. Pursuant to 40 CFR §63.684(a) and (b), Off-Site Waste and Recovery Operation MACT, the permittee shall comply with the requirements of 40 CFR §63.684(a) and any of the treatment processes under 40 CFR §63.684 (b), as applicable, for the treatment of off-site material to remove or destroy HAP for which §63.683(b)(1)(i) references such treatment.
40. Pursuant to 40 CFR §63.684(f), Off-Site Waste and Recovery Operation MACT, the permittee shall maintain records of each treatment process in accordance with the requirements in 40 CFR §63.696.
41. Pursuant to 40 CFR §63.684(g), Off-Site Waste and Recovery Operation MACT, the permittee shall submit and prepare reports for each treatment process in accordance with 40 CFR §63.697(a).
42. Pursuant to 40 CFR §63.685(a) and (b), Off-Site Waste and Recovery Operation MACT, the permittee shall comply with the requirements of §63.685(a) and (b), and control air emissions from tanks for which §63.683(b)(1)(i) references such air emission control.

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43. Pursuant to 40 CFR §63.685(c), Off-Site Waste and Recovery Operation MACT, the permittee shall comply with the requirements of §63.685(c) when controlling air emissions from tanks using Tank Level 1 controls, unless the permittee has implemented Tank Level 2 controls.
44. Pursuant to 40 CFR §63.685(d), Off-Site Waste and Recovery Operation MACT, the permittee shall comply with §63.685(d) for controlling air emissions from a tank, which requires the use of Tank Level 2 controls.
45. Pursuant to 40 CFR §63.685(g), Off-Site Waste and Recovery Operation MACT, the permittee shall comply with the requirements of §63.685(g)(1) through (3) for the control of tank air emissions if venting to a control device.
46. Pursuant to 40 CFR §63.689(a), Off-Site Waste and Recovery Operation MACT, the permittee shall comply with the requirements of either §63.689(b) or (c), as applicable, for the control of air emissions from transfer systems for which §63.683(b)(1)(i) references such air emission control.
47. Pursuant to 40 CFR §63.691(a), Off-Site Waste and Recovery Operation MACT, the permittee shall comply with the requirements of §63.691(a) and (b) for the control of equipment leaks for which §63.680(c)(3) references such air emission control.
48. Pursuant to 40 CFR §63.693(b)(1), Off-Site Waste and Recovery Operation MACT, for each closed-vent system, the permittee shall meet the requirements of 40 CFR §63.693(b)(1).
49. Pursuant to 40 CFR §63.693(b)(2), Off-Site Waste and Recovery Operation MACT, for each control device, the permittee shall meet the requirements of 40 CFR §63.693(b)(2).
50. Pursuant to 40 CFR §63.694, Off-Site Waste and Recovery Operation MACT, the permittee shall perform testing as specified in 40 CFR §63.694 for all applicable treatment processes and/or control devices used for compliance with applicable standards under this subpart.
51. Pursuant to 40 CFR §63.695, Off-Site Waste and Recovery Operation MACT, the permittee shall comply with the inspection and monitoring requirements of 40 CFR §63.695 for all affected tanks, closed-vent systems, transfer systems, and control devices as applicable.
52. Pursuant to 40 CFR §63.696, Off-Site Waste and Recovery Operation MACT, the permittee shall comply with all applicable recordkeeping requirements in 40 CFR

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§63.696, including requirements in 40 CFR §63.10, General Provisions that applies as specified in Table 2 of 40 CFR §63, Subpart DD.

53. Pursuant to 40 CFR §60.252(c), Subpart Y – Coal Preparation Plants, coal processing and conveying equipment, coal storage, and coal transfer equipment shall be limited to 20% opacity. This condition applies to 6M01 (Storage pile and coal unloading area).
54. Pursuant to 40 CFR §60.254(b)(2), Subpart Y - Coal Preparation Plants, Method 9 shall be used to determine opacity.
55. Pursuant to §19.901 et seq of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR 52.21, Boiler #4 and Boiler #5 shall be limited to NO_x emission rates of 13.3 and 22.0 lb/hr, respectively.

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Organic Sulfonation Process: 5M01-01, 5M01-02, 5M01-05, 5M01-06, 5M01-07, 5M01-08, 5M01-09, 5M03-01, 5M03-02, 5M04-01, 5M04-02, 5M04-10, 5M05-01, 5M05-02, 5M11-01, 5M11-04, 5M11-05, 5M11-06, 5M11-07, 5M11-08, 5M11-09, 5M11-15, 5M13-01, 5M16-01, 5M18-01, 5M18-02, 5M18-03, 5MNOBS-TNK, NOBS-FUG, 5M01-TSP

Process Description

The organic sulfonate facility produces a solid material for use as a household consumer product. The two organic sulfonation facilities include reactors, centrifuges, scrubbers, distillation equipment, raw materials and process tanks. Scrubbers are the primary means for controlling emissions from the production facilities. The phenol and solvent storage tanks vent to a scrubber. The acid loading station is equipped with a scrubber to reduce emissions (PES 5M05-01). The low vapor pressures of the contents of the storage tanks minimize the potential for VOC emissions from these emission points.

NSPS subpart NNN (SOCMI Distillation Operations) applies to a scrubber associated with an acetic acid distillation column (5M01-02).

NSPS Subpart VV (SOCMI VOC Equipment Leaks) applies to certain equipment in this process such as pumps, compressors, pressure relief devices, sampling connection systems, and valves.

NSPS Subpart Kb (VOC Storage Vessels) applies to several tanks in the organic sulfonate production area.

Specific Conditions

56. Pursuant to §19.501 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

PES #	ARK ID#	Equipment Type	Pollutant	lb/hr
5M01-01	SPS-S-01	Scrubber	VOC	0.1
5M01-02	SPS-VE-03	Scrubber	VOC	0.1
5M01-05	PROD-VE-04	Scrubber	VOC	0.1
5M01-06	SPS-S-02	Scrubber	VOC	0.5
5M01-07	PROD-VE-05	Scrubber	VOC	0.1
5M01-08	EX-VE-01	Scrubber	VOC	0.1

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PES #	ARK ID#	Equipment Type	Pollutant	lb/hr
5M01-09	SPS-S-03	Scrubber	VOC	0.2
5M03-01	PROD-VE-02	Scrubber	VOC	0.1
5M03-02	SPS-VE-01	Scrubber	VOC	0.2
5M04-01	SPS-VE-02	Scrubber	VOC	0.6
5M04-02	PROD-VE-01	Scrubber	VOC	0.2
5M04-10	SPS-VE-04	Scrubber	SO ₂	0.1
5M05-01	PROD-VE-03	Scrubber	VOC	0.1
5M05-02	EX-C-20	Fabric Filter	PM ₁₀	0.1
5M11-01	SPS-S-201	Scrubber	VOC	0.1
5M11-04	PROD-VE-304	Scrubber	VOC	0.1
5M11-05	SPS-S-202	Scrubber	VOC	0.1
5M11-06	PROD-VE-305	Scrubber	VOC	0.1
5M11-07	EX-VE-401	Scrubber	VOC	0.1
5M11-08	SER-VE-501	Scrubber	PM ₁₀	1.1
5M11-09	SER-VE-502	Scrubber	PM ₁₀	1.1
5M11-15	SPS Dust Control	Dust Collector	PM ₁₀	0.1
5M13-01	PROD-VE-302	Scrubber	VOC	0.1
5M16-01	Supersack Dust Control	Dust Collector	PM ₁₀	0.1
5M18-01	SER-VE-01	Dust Collector	PM ₁₀	0.9
5M18-02	SER-VE-02	Dust Collector	PM ₁₀	3.4
5M18-03	SER-VE-03	Dust Collector	PM ₁₀	0.3
5MNOBS-TNK	EX-TF-01, EX-TF-02, EX-TF-03, MLG-TF-01	Tanks	VOC	0.4

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PES #	ARK ID#	Equipment Type	Pollutant	lb/hr
NOBS-FUG	Fugitive		VOC	6.2
5M01-TSP	Particulate Fugitive		PM ₁₀	3.1

57. Pursuant to 18.801 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates presented in the following table.

PES #	ARK ID#	Equipment Type	Pollutant	lb/hr
5M05-02	EX-C-20	Fabric Filter	PM	0.1
5M11-08	SER-VE-501	Scrubber	PM	1.1
5M11-09	SER-VE-502	Scrubber	PM	1.1
5M11-15	SPS Dust Control	Dust Collector	PM	0.1
5M16-01	Supersack Dust Control	Dust Collector	PM	0.1
5M18-01	SER-VE-01	Dust Collector	PM	0.9
5M18-02	SER-VE-02	Dust Collector	PM	3.4
5M18-03	SER-VE-03	Dust Collector	PM	0.3
5M01-TSP	Particulate Fugitive		PM	3.1

58. Pursuant to §18.501 of the Arkansas Air Pollution Control Code (Regulation 18), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, except during periods of startup, shutdown and malfunction, the permittee shall not exceed 5% opacity over a three (3) hour period at sources 5M05-02, 5M11-15, 5M16-01, 5M18-01, 5M18-02, 5M18-03, 5M11-08, and 5M11-09. Compliance with this limit shall be demonstrated as outlined in the Facility Operating Plan dated February 21, 2002.
59. Pursuant to 40 CFR Part 60, Subpart Kb, the permittee shall comply with all applicable provisions of the Standards of Performance for Volatile Organic Liquid Storage Vessels. See Plantwide Conditions 13 through 21.
60. Pursuant to 40 CFR Part §60.662(c), Subpart NNN - Manufacturing Industry (SOCMI) Distillation Operations, the permittee shall maintain a TRE index value of greater than

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- 1.0 without the use of VOC emission control device for 5M01-02. The permittee shall document and record all calculations performed to determine the TRE index value of the vent stream per §60.664(d), (e) and (f).
61. Pursuant to 40 CFR §60.665(h), Subpart NNN - Manufacturing Industry (SOCMI) Distillation Operations, the permittee shall keep up-to-date, readily accessible records of:
 1. Any changes in production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of recovery equipment or a distillation unit;
 2. Any recalculation of the TRE index value performed pursuant to §60.664(f), and
 3. The results of any performance test performed pursuant to the methods and procedures required by §60.664(d).
 62. Pursuant to 40 CFR Part §60.660, Subpart NNN - Manufacturing Industry (SOCMI) Distillation Operations, the provisions of this subpart apply to affected sources as defined in paragraph (b) of this section, and is part of process or production unit that produces any of the chemicals listed in §60.667 as a product, co-product, by-product, or intermediate, except as provided in paragraph (c).
 63. Pursuant to 40 CFR Part §60.660(c)(4), Subpart NNN - Manufacturing Industry (SOCMI) Distillation Operations, this source is operated under the exemption allowed by this citation; being, an affected facility with a TRE index value greater than 8.0. This source is exempt from all provisions of this subpart except for §60.662; §60.664(d), (e), and (f); and §60.665(h) and (l).
 64. Pursuant to 40 CFR Part §60.662, Subpart NNN - Manufacturing Industry (SOCMI) Distillation Operations, the permittee shall use any of the options listed in §60.662(a), (b), or (c) for an applicable treatment standard, providing proper notification is provided to the Department to document the change in treatment standard. The permittee shall then comply with the requirements of §60.663, §60.664, and §60.665 as applicable to the emission standard chosen.
 65. Pursuant to 40 CFR Part §60.665, Subpart NNN - Manufacturing Industry (SOCMI) Distillation Operations, the permittee shall comply with all recordkeeping and reporting requirements in §60.665 as applicable to the treatment standard and control devices used to meet compliance with this subpart.
 66. Pursuant to 40 CFR Part §60.665(k), Subpart NNN - Manufacturing Industry (SOCMI) Distillation Operations, the permittee is exempt from the quarterly reporting requirements contained in §60.7(c) of the General Provisions.
 67. Pursuant to 40 CFR Part §60.665(1)(7), Subpart NNN - Manufacturing Industry (SOCMI) Distillation Operations, the permittee shall submit semiannual reports of the

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following information: Any recalculation of the TRE index value, as recorded under §60.665(h).

68. Pursuant to 40 CFR Part §60, Subpart VV - Standards of Performance for Equipment Leaks of VOC in SOCFI the permittee shall comply with the applicable requirements of this Subpart in the acetic acid recovery area of the Organic Sulfonation process.

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Chemical Waste Destructor: 6M03-05 and DEST-FUG

Process Description

The chemical waste destructor at Arkansas Eastman is designed to burn a mixture of waste streams resulting from various fine chemical manufacturing facilities at the plant. Some of the waste is mainly organic solvents, but the majority is comprised of aqueous solutions containing some organic and salt compounds. The equipment used to burn the waste includes a burner assembly, oxidizer chamber, weir tank, quench separator tank, high energy scrubber, vane separator, and a stack. The chemical destructor is a vertically downfired unit.

The chemical waste destructor at Eastman Chemical is subject to 40 CFR Part 63, Subpart EEE, *National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors*.

Emissions were calculated for the incinerator (6M03-05) and for fugitive equipment leaks (DEST-FUG).

Specific Conditions

Specific Conditions 69 through 77 shall apply until the compliance date for existing hazardous waste combustion units, as established by 40 CFR Part 63, Subpart EEE. This date is currently set as September 30, 2003.

69. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr
6M03-05	Chemical Waste Destructor	PM ₁₀	20.00
		SO ₂	11.51
		VOC	2.38
		CO	11.32
		NO _x	22.92
DEST-FUG	Destructor Fugitives	VOC	1.17

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70. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr
6M03-05	Chemical Waste Destructor	PM	20.00
		Inorganics*	6.04
		Total HAPs**	6.90

*Inorganics are considered to be non-VOC Hazardous Air Pollutants.

**Hazardous Air Pollutants include all compounds so designated by Section 112(b)(1) of the Clean Air Act. Plantwide Hazardous Air Pollutant emissions are limited in Plantwide Conditions 8, 10 and 11.

71. Pursuant to §19.503 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity as measured by Method 9 at the chemical destructor in accordance with the Facility Operating Plan dated February 21, 2002, except during periods of startup, shutdown, and malfunction. Opacity readings will be conducted in accordance with the Facility Operating Plan dated February 21, 2002.

The provisions of Specific Condition 72 through 83 shall apply upon the compliance date for existing hazardous waste combustion units, as established by 40 CFR Part 63, Subpart EEE. This date is currently set as September 30, 2003.

72. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr
6M03-05	Chemical Waste Destructor	PM ₁₀	3.20
		SO ₂	20.16
		VOC	0.86
		CO	6.03
		NO _x	25.20
DEST-FUG	Destructor Fugitives	VOC	1.2

73. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

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PES #	Description	Pollutant	lb/hr
6M03-05	Chemical Waste Destructor	PM	3.20
		Inorganics*	6.04
		Total HAPs**	6.90

74. Pursuant to §19.503 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall not exceed 20% opacity as measured by Method 9 at the chemical destructor in accordance with the Facility Operating Plan dated February 21, 2002, except during periods of startup, shutdown, and malfunction. Opacity readings will be conducted in accordance with the Facility Operating Plan dated February 21, 2002.
75. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain the operating limits as outlined in the Documentation of Compliance (DOC) for the chemical destructor. The DOC is required by 40 CFR Part 63, Subpart EEE, and is addressed in Specific Condition 80(n) of this section.
76. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall maintain records of the chemical destructor operating limits as specified in the DOC. These records shall be maintained on site and available for inspection upon request.
77. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall record the hourly feed rate to the chemical destructor. These records shall be maintained on site and made available for inspection upon request.
78. Pursuant to §18.1002 of Regulation 18 and 40 CFR Part 52 Subpart E, the permittee shall measure the VOC emissions at the chemical destructor every five (5) years using Method 25A. The permittee shall also determine the destruction efficiency by measuring the inlet and outlet concentrations of VOC during this test. Based on maximum rates, the destruction efficiency during testing shall be 99.99% or higher.
79. Pursuant to §19.702 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall measure the particulate emissions from the chemical destructor annually using Method 5. The permittee shall measure the CO emissions annually using Method 10. The permittee shall measure the NO_x emissions annually using Method 7E. The permittee shall measure the SO₂ emissions annually using Method 6C.

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80. Pursuant to §19.304 of Regulation 19 and 40 CFR §63.1200, this facility is subject to 40 CFR Part 63, Subpart EEE, *National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors*. Applicable requirements include, but are not limited to, the following conditions:

Emission Limits

- a. Pursuant to §63.1203(a)(1), the permittee shall not discharge or cause combustion gases to be emitted to the atmosphere that contain dioxin and furans in excess of 0.2 ng TEQ/dscm, corrected to 7 percent oxygen.
- b. Pursuant to §63.1203(a)(2), the permittee shall not discharge or cause combustion gases to be emitted to the atmosphere that contain mercury in excess of 130 µg/dscm, corrected to 7 percent oxygen.
- c. Pursuant to §63.1203(a)(3), the permittee shall not discharge or cause combustion gases to be emitted to the atmosphere that contain lead and cadmium in excess of 240 µg/dscm, combined emissions, corrected to 7 percent oxygen.
- d. Pursuant to §63.1203(a)(4), the permittee shall not discharge or cause combustion gases to be emitted to the atmosphere that contain arsenic, beryllium, and chromium in excess of 97µg/dscm, combined emissions, corrected to 7 percent oxygen.
- e. Pursuant to §63.1203(a)(5)(i), the permittee shall not discharge or cause combustion gases to be emitted to the atmosphere that contain 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 and hydrocarbons in excess of 10 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, and reported as propane, at any time during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by §63.1206(b)(7).
- f. Pursuant to §63.1203(a)(6), the permittee shall not discharge or cause combustion gases to be emitted to the atmosphere that contain 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.
- g. Pursuant to §63.1203(a)(7), the permittee shall not discharge or cause combustion

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gases to be emitted to the atmosphere that contain particulate matter in excess of 34 mg/dscm corrected to 7 percent oxygen.

Destruction and removal efficiency (DRE) standard.

- h. Pursuant to §63.1203(c), the permittee shall maintain a 99.99% destruction and removal efficiency (DRE) for each principal organic hazardous constituent (POHC) designated under paragraph (c)(3) of this section. The DRE shall be calculated using the following equation:

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

Where:

W_{in} = mass feedrate of one principal organic hazardous constituent (POHC) in a waste feed stream; and

W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

- i. Pursuant to §63.1203(c)(3)(i), the permittee must treat the POHCs in the waste feed that are specified under paragraph (c)(3)(ii) of this section to the extent required by paragraphs 63.1203(c)(1) and (c)(2) (i.e. 99.99% as stated in the previous Specific Condition).
- j. Pursuant to §63.1203(c)(3)(ii), the permittee shall specify one or more POHCs from the list of hazardous air pollutants established by 42 U.S.C. 7412(b)(1), excluding caprolactum as provided by §63.60, for each waste to be burned. The permittee must base this specification on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses or other data and information.

Compliance Provisions

- k. Pursuant to §63.1206(a)(1), the permittee shall comply with the standards of 40 CFR Part 63, Subpart EEE no later than September 30, 2003 unless the Administrator grants an extension under §63.6(i) or §63.1213.
- l. Pursuant to §63.1206(b)(1), the permittee shall comply with the emission standards and operating requirements set forth in 40 CFR Part 63, Subpart EEE at all times when hazardous wastes are in the combustion chamber of the incinerator.

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- m. Pursuant to §63.1206(b)(2), the permittee shall demonstrate compliance based on performance testing under operating conditions representative of the extreme range of normal conditions. This performance test shall be conducted as required by 40 CFR §63.1206(b)(12). Prior to the completion of the performance test, the permittee shall document compliance with 40 CFR Part 63, Subpart EEE no later than September 30, 2003. This documentation of compliance (DOC) will ensure that operating parameters are established to ensure compliance with this subpart.
- n. Pursuant to §63.1206(b)(4), the permittee may petition the Administrator to grant an extension of compliance with the emission standards of this subpart as provided by §63.6(i) and §63.1213.
- o. Pursuant to §63.1206(b)(5)(i), the permittee shall comply with the requirements of notification, performance testing, and waste-burning restrictions as outlined in §63.1206(b)(5)(i)(A) through (C) if the facility plans to make a change in design, operation, or maintenance that could adversely affect compliance.
- p. Pursuant to §63.1206(b)(5)(ii), the permittee shall document any changes not affecting compliance in the facility operating record. Revisions reflecting such changes shall also be made, as necessary, to the performance test plan, Documentation of Compliance, Notification of Compliance, and the start-up, shutdown, and malfunction plan.
- q. Pursuant to §63.1206(b)(6), the permittee shall ensure and document compliance with the CO emission standard using a continuous emission monitoring system (CEMS). The permittee shall ensure and document compliance with the hydrocarbon emission standard by complying with the CO emission standard, and by demonstrating that the highest hourly rolling average hydrocarbon level emitted during the comprehensive performance test does not exceed the hydrocarbon emission limit.
- r. Pursuant to §63.1206(b)(7), the permittee shall demonstrate destruction removal efficiency (DRE) of at least 99.99% during the comprehensive performance test conducted in compliance with the conditions of §63.1207(b)(1) of this subpart.
- s. Pursuant to §63.1206(b)(8)(i) and (ii), any particulate matter and opacity standards or any permit or other emissions operating parameter limits or conditions, including any limitation on workplace practices, that are applicable to hazardous waste combustors to ensure compliance with any particulate matter or opacity standard of parts 60, 61, 63, 264, 265, and 266 of this chapter (i.e., any title 40 particulate or opacity standards) do not apply while the permittee conducts particulate matter continuous emissions monitoring system (CEMS) correlation

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tests. However, compliance with this condition is not required until such time that the Agency promulgates all performance specifications and operational requirements applicable to PM CEMS.

- t. Pursuant to §63.1206(b)(8)(iii)(A) and (B), for provisions of this section to apply, the permittee must develop a particulate matter CEMS correlation test plan that includes the following information. This test plan may be included as part of the comprehensive performance test plan required under §§63.1207(e) and (f):
 - 1. Number of test conditions and number of runs for each test condition;
 - 2. Target particulate matter emission level for each test condition;
 - 3. How you plan to modify operations to attain the desired particulate matter emission levels; and
 - 4. Anticipated normal emission levels.The permittee shall submit the particulate CEMS correlation test plan to the Administrator for approval at least 90 calendar days before the correlation test is scheduled to be conducted. However, compliance with this condition is not required until such time that the Agency promulgates all performance specifications and operational requirements applicable to PM CEMS.
- u. Pursuant to §63.1206(b)(8)(iv), if the Administrator fails to approve or disapprove the correlation test plan with the time period specified by §63.7(c)(3)(i), the plan is considered approved, unless the Administrator has requested additional information.
- v. Pursuant to §63.1206(b)(8)(v), the particulate matter and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for a correlation test, including all runs of all test conditions, unless more time is approved by the Administrator.
- w. Pursuant to §63.1206(b)(8)(vii), the permittee must return to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed.
- x. Pursuant to §63.1206(b)(11), the permittee must calculate the hazardous waste residence time and include the calculation in the performance test plan under §63.1207(f) and the operating record. The permittee must also provide the hazardous waste residence time in the Documentation of Compliance under §63.1211(d) and the Notification of Compliance under §§63.1207(j) and 63.1210(d).
- y. Pursuant to §63.1206(b)(12)(i), the permittee must conduct a minimum of three runs of a performance test required under §63.1207 to document compliance with

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the emission standards of this subpart.

- z. Pursuant to §63.1206(b)(12)(ii), the permittee must document compliance with the emission standards based on the arithmetic average of the emission results of each run, except that the permittee must document compliance with the destruction and removal efficiency standard for each run of the comprehensive performance test individually.

General Operating Requirements

- aa. Pursuant to §63.1206(c)(1)(i), the permittee must operate only under the operating requirements specified in the Documentation of Compliance under §63.1211(d) or the Notification of Compliance under §§63.1207(j) and 63.1210(d), except:
 - 1. Pursuant to §63.1206(c)(1)(i)(A), during performance tests under approved test plans according to §63.1207(e), (f), and (g), and
 - 2. Pursuant to §63.1206(c)(1)(i)(B), under the conditions of paragraph (b)(1)(i) or (ii) of this section:
 - i. Pursuant to §63.1206(c)(1)(ii), the Documentation of Compliance and the Notification of Compliance must contain operating requirements including, but not limited to, the operating requirements of this section and §63.1209.
 - ii. Pursuant to §63.1206(c)(1)(iii), failure to comply with the operating requirements is failure to ensure compliance with the emissions standards of this subpart.
 - iii. Pursuant to §63.1206(c)(1)(iv), operating requirements in the Notification of Compliance are applicable requirements for purposes of parts 70 and 71 of this chapter.
 - iv. Pursuant to §63.1206(c)(1)(v), the operating requirements specified in the Notification of Compliance will be incorporated in the Title V permit.
- bb. Pursuant to §63.1206(c)(2)(i), except as provided in by paragraph (c)(2)(ii) of this section, the permittee is subject to the startup, shutdown, and malfunction plan requirements of §63.6(e)(3).
 - 1. Pursuant to §63.1206(c)(2)(ii), even if the permittee follows the startup and shutdown procedures and the corrective measures upon malfunction that are prescribed in the startup, shutdown, and malfunction plan, the emission standards and operating requirements of this subpart apply if

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- hazardous waste is in the combustion chamber.
2. Pursuant to §63.1206(c)(2)(iii), the permittee must identify in the plan the projected oxygen correction factor based on normal operations to use during periods of startup and shutdown.
 3. Pursuant to §63.1206(c)(2)(iv), the permittee must record the plan in the operating record.
- cc. Pursuant to §63.1206(c)(3)(i), upon the compliance date, the permittee must operate the combustor with a functioning system that immediately and automatically cuts off the hazardous waste feed, except as provided by paragraph (c)(3)(viii) of this section, when the following conditions apply:
1. Pursuant to §63.1206(c)(3)(i)(A), when operating parameter limits specified under §63.1209; an emission standard monitored by CEMS; and the allowable combustion chamber pressure;
 2. Pursuant to §63.1206(c)(3)(i)(B), when the span value of any CMS detector, except a CEMS, is met or exceeded;
 3. Pursuant to §63.1206(c)(3)(i)(C), upon malfunction of a CMS monitoring an operating parameter limit specified under §63.1209 or an emission level; or
 4. Pursuant to §63.1206(c)(3)(i)(D), when any component of the automatic waste feed cutoff system fails.
- dd. Pursuant to §63.1206(c)(3)(ii), during an automatic waste feed cutoff (AWFCO) the permittee must continue to duct combustion gases to the air pollution control system while hazardous waste remains in the combustion chamber.
- ee. Pursuant to §63.1206(c)(3)(iii), the permittee must continue to monitor during the cutoff the operating parameters for which limits are established under §63.1209 and the emissions required under that section to be monitored by a CEMS, and the permittee shall not restart the hazardous waste feed until the operating parameters and emission levels are within specified limits.
- ff. Pursuant to §63.1206(c)(3)(iv), if the AWFCO system fails to automatically and immediately cutoff the flow of hazardous waste upon exceedance of a parameter required to be interlocked with the AWFCO system under paragraph (c)(3)(i) of this section, the permittee has failed to comply with the AWFCO requirements of paragraph (c)(3) of this section.
- gg. Pursuant to §63.1206(c)(3)(v), if, after any AWFCO, there is an exceedance of any emission standard or operating requirement, irrespective of whether the exceedance occurred while hazardous waste remained in the combustion

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chamber, the permittee shall investigate the cause of the AWFCO, take appropriate corrective measures to minimize future AWFCOs and record the findings and corrective measures in the operating record.

- hh. Pursuant to §63.1206(c)(3)(vi)(A), for each set of 10 exceedances of an emissions standard or operating requirement while hazardous waste remains in the combustion chamber during a 60-day block period, the permittee must submit to the Administrator a written report within 5 calendar days of the 10th exceedance documenting the exceedances and the results of the investigation and corrective measures taken.
- ii. Pursuant to §63.1206(c)(3)(vi)(B), on a case-by-case basis, the Administrator may require excessive exceedance reporting when fewer than 10 exceedances occur during a 60-day block period.
- jj. Pursuant to §63.1206(c)(3)(vii), the AWFCO system and associated alarms must be tested at least weekly to verify operability, unless the permittee documents in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, the permittee must conduct operability testing at least monthly. The permittee must document and record in the operating record AWFCO operability test procedures and results.
- kk. Pursuant to §§63.1206(c)(4)(i through iv), the permittee is subject to the emergency safety vent (ESV) operating and reporting requirements set forth in this section.
- ll. Pursuant to §§63.1206(c)(5)(i)(A) and (ii), the permittee is subject to the combustion system leak control system operating and reporting requirements set forth in these sections.
- mm. Pursuant to §§63.1206(c)(6)(i through v), the permittee is subject to the operator training and certification standards set forth in this section.
- nn. Pursuant to §63.1206(c)(7)(i)(A-D), the permittee must prepare and at all times operate according to an operation and maintenance plan which complies with the requirements set forth in these sections.

Performance Testing Requirements

- oo. Pursuant to §§63.1207(a-n), the permittee must conduct performance testing in accordance with the applicable requirements contained in this section.

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- pp. Pursuant to §63.1207(c)(1), the permittee must commence the initial comprehensive performance test not later than six months after the compliance date.

- qq. Pursuant to §63.1207(d)(1) through (3), the permittee must conduct testing periodically as described in paragraphs (d)(1) through (3) of this section. The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. The permittee may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test.
 - (1) The permittee must commence comprehensive testing no later than 61 months after the date of commencing the previous comprehensive performance test.
 - (2) The permittee must commence confirmatory performance testing no later than 31 months after the date of commencing the previous comprehensive performance test. To ensure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Administrator will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test.
 - (3) The permittee must complete performance testing within 60 days after the date of commencement, unless the Administrator determines that a time extension is warranted based on documentation in writing of factors beyond the permittee's control that prevent testing from being completed within 60 days.

- rr. Pursuant to §63.1207(e)(i), the permittee must submit to the Administrator a notification of intent to conduct a comprehensive performance test and CMS performance evaluation and a site specific test plan and CMS performance evaluation plan at least one year before the performance test and performance evaluation are scheduled to begin.

- ss. Pursuant to §63.1207(e)(i)(B), the permittee must submit to the Administrator a notification of intent to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin.

- tt. Pursuant to §63.1207(e)(ii), the permittee must submit to the Administrator a notification of intent to conduct a confirmatory performance test and CMS performance evaluation and a test plan and CMS performance evaluation plan at

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least 60 calendar days before the performance test is scheduled to begin.

Test Methods

- uu. Pursuant to §§63.1208(a-b), the permittee shall use the test methods contained in this section when determining compliance with the emissions standards of this subpart.

Monitoring Requirements

- vv. Pursuant to §§63.1209 (a-q), the permittee is subject to the applicable monitoring requirements contained in these sections.
- ww. Pursuant to §63.1209(a)(1)(i), the permittee must either use a carbon monoxide or hydrocarbon CEMS to demonstrate compliance with either the carbon monoxide and hydrocarbon standards under this subpart. The permittee must also use an oxygen CEMS to continuously correct the carbon monoxide and hydrocarbon levels to 7 percent oxygen.
- xx. Pursuant to §63.1209(a)(1)(iii), the permittee must install, calibrate, maintain, and operate a particulate matter CEMS to demonstrate and monitor compliance with the particulate matter standards under this subpart. However, compliance with the requirements in this section to install, calibrate, maintain, and operate the PM CEMS is not required until such time that the Agency promulgates all performance specifications and operational requirements applicable to PM CEMS.
- yy. Pursuant to §63.1209(a)(2), the permittee must install, calibrate, maintain, and continuously operate the CEMS in compliance with the quality assurance procedures provided in the appendix to this subpart and Performance Specifications 1 (opacity), 4B (carbon monoxide and oxygen), and 8A (hydrocarbons) in Appendix B, Part 60 of this chapter.
- zz. Pursuant to §63.1209(a)(3), the permittee must comply with the span requirements of §63.1209(a)(3).
- aaa. Pursuant to §63.1209(a)(5), the permittee may petition the Administrator to use CEMS for compliance monitoring for other standards in lieu of compliance with the corresponding operating parameter limits under this section.
- bbb. Pursuant to §63.1209(a)(6), the permittee will begin recording one-minute and hourly rolling average values as necessary to ensure that 60 one-minute values will

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be available for calculating the initial hourly rolling average before the compliance date. The permittee will continue to use the CEMS to monitor parameters as required in §63.1209(a)(6).

- ccc. Pursuant to §63.1209(a)(7), the permittee will use the Comprehensive Performance Test to demonstrate that the THC standard is met to establish operating parameters for DRE.
- ddd. Pursuant to §63.1209(b), the permittee will use Continuous Monitoring Systems where necessary to ensure compliance with operating parameters established in the Documentation of Compliance or the Notification of Compliance.
- eee. Pursuant to §63.1209(c)(1), prior to feeding the material, the permittee must obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits provided in this section.
- fff. Pursuant to §63.1209(c)(2), the permittee must develop and implement a feedstream analysis plan and record it in the operating record.
- ggg. Pursuant to §63.1209(c)(3), the permittee must submit the feedstream analysis plan to the Administrator for review and approval, if requested.
- hhh. Pursuant to §63.1209(c)(4), to comply with the applicable feedrate limits of this section, the permittee must monitor and record the feedrates as follows:
 - (1) Determine and record the value of the parameter for each feedstream by sampling and analysis or other method;
 - (2) Determine and record the mass or volume flowrate of each stream by a CMS. If the permittee determines flowrate of a feedstream by volume, the permittee must determine and record the density of the feedstream by sampling and analysis (unless the permittee reports the constituent concentration in units of weight per volume); and
 - (3) Calculate and record the mass feedrate of the parameter per unit time.
- iii. Pursuant to §63.1209(d)(1), the requirements of §§63.8(d) (Quality control program) and (e) (Performance evaluation of continuous monitoring systems) apply, except that the permittee must conduct performance evaluations components of the CMS under the frequency and procedures (for example, submittal of performance evaluation test plan for review and approval) applicable to performance tests as provided by §63.1207.
- jjj. Pursuant to §63.1209(f), the permittee shall maintain and operate each CMS as specified in §63.8(c), except for §63.8(c)(3) and §63.8(c)(4)(ii). The permittee shall

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have the CMS installed, calibrated, and operational on the compliance date. The permittee must sample the regulated parameter without interruption, and evaluate the detector response at least once each 15 seconds, and compute and record the average values at least every 60 seconds.

- kkk. Pursuant to §63.1209(h), the permittee shall follow the requirements for the reduction of monitoring data as specified in 40 CFR §63.8(g).
- lll. Pursuant to §63.1209(i), when one operating parameter is used to ensure compliance with one or more standards, the permittee must use the most stringent limit, determined during the comprehensive performance test, as the limit for that operating parameter.
- mmm. Pursuant to §63.1209(j), to remain in compliance with the destruction and removal efficiency (DRE) standards, the permittee must establish operating limits during the comprehensive performance test (or during a previous DRE test under provisions of §63.1206(b)(7)) for the following parameters, unless the limits are based on manufacturer specifications and comply with those limits at all times that hazardous waste remains in the combustion chamber.
- nnn. Pursuant to §63.1209(j)(1)(i) and (ii), the permittee must measure the temperature of each combustion chamber at a locations that best represents, as practicable, the bulk gas temperature in the combustion zone. The permittee must document the temperature measurement location in the test plan submitted under §63.1207(e), and establish a minimum rolling average limit as the average of the test run values.
- ooo. Pursuant to §63.1209(j)(2)(i), as an indicator of gas residence time in the control device, the permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that is documented in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run.
- ppp. Pursuant to §63.1209(j)(3)(i), the permittee must establish limits on the maximum pumpable and total (i.e., pumpable and nonpumpable) hazardous waste feedrate for each location where hazardous waste is fed.
- qqq. Pursuant to §63.1209(j)(4), the permittee must specify operating parameters and limits to ensure that good operation of each hazardous waste firing system is maintained.
- rrr. Pursuant to §63.1209(k), the permittee must comply with the dioxin and furans emission standard by establishing and complying with the following operating

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parameter limits. You must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications.

- sss. Pursuant to §63.1209(k)(2)(i) and (ii), the permittee must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. The permittee must document the temperature measurement location in the test plan and establish a minimum hourly rolling average limit as the average of the test runs.
- ttt. Pursuant to §63.1209(k)(3)(i) and (ii), as an indicator of gas residence time in the control device, the permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter which is an appropriate surrogate for residence time, as the hourly rolling averages for each run. Compliance with this limit is on an hourly rolling average basis.
- uuu. Pursuant §63.1209(k)(4)(i – iii), the permittee must establish limits on the maximum pumpable and total (pumpable and nonpumpable) waste feedrate for each location where waste is fed and establish limits as the average of the maximum hourly rolling averages for each run. Compliance shall be based on an hourly rolling average basis.
- vvv. Pursuant to §63.1209(l), the permittee shall ensure compliance with the mercury emission standard by establishing a minimum mercury feed rate limit, and maintaining the scrubber operating parameters described under §63.1209(o).
- www. Pursuant to §63.1209(m), the permittee must comply with the particulate matter emission standard by establishing and complying with the operating parameter limits found in §63.1209(m) of this subpart.
- xxx. Pursuant to §63.1209(m)(3), the permittee must establish a maximum ash feedrate limit as the average of the test run averages.
- yyy. Pursuant to §63.1209(n), the permittee must comply with the semivolatile metal (cadmium and lead) and low volatile metal (arsenic, beryllium, and chromium) emission standards by establishing and complying with the following operating parameter limits:
 - 1. Pursuant to §63.1209(n)(2)(i)(A) and (B), the permittee must establish feed rate limits for semivolatile metals and low volatile metals, with compliance based on 12-hour rolling average limits as the average of the test run averages.
 - 2. Pursuant to §63.1209(n)(3), the permittee must establish operating

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- parameter limits on the particulate matter control device as specified by paragraph 63.1209(m)(1).
3. Pursuant to §63.1209(n)(4), the permittee must establish a 12-hour rolling average limit for the feedrate of total chlorine and chloride in all feedstreams as the average of the test run averages.
- zzz. Pursuant to §63.1209(o)(1), the permittee must establish a 12-hour rolling average limit for the total feedrate of chlorine in all feedstreams as the average of the test run averages.
- aaaa. Pursuant to §63.1209(o)(1)(2), as an indicator of gas residence time in the control device, the permittee must establish a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter documented in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run. This limit must be maintained on an hourly rolling average basis.
- bbbb. Pursuant to §63.1209(o)(3), the permittee must establish the following parameter limits for the wet scrubber:
1. *Minimum pressure drop.* The permittee must establish a limit on minimum pressure drop on an hourly rolling average as the average of the test run averages.
 2. *Minimum pH.* The permittee must establish a limit on minimum pH on an hourly rolling average as the average of the test run averages.
 3. *Minimum scrubber liquid flow rate.* The permittee must establish a minimum scrubber liquid flow rate on an hourly rolling average as the average of the test run averages.

Notification Requirements

- cccc. Pursuant to §63.1210(a)(1), the permittee shall submit all of the applicable notifications prior to the deadlines established in this subpart.
- dddd. Pursuant to §63.1210(a)(2), the permittee must submit the required notifications outlined in this section to the Administrator in order to request or elect to comply with the alternative requirements contained in this subpart.
- eeee. Pursuant to §63.1210(b)(2), upon postmark of the Notification of Compliance, the operating parameter limits identified in the Notification of Compliance, as applicable, shall be complied with, the limits identified in the Document of Compliance or a previous Notification of Compliance are no longer applicable.

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Recordkeeping and Reporting Requirements

- ffff. Pursuant to §63.1211, the permittee shall submit the reports required by this subpart to the Administrator prior to the deadlines set forth in this subpart.

Procedure for Extending the Compliance Date

- gggg. Pursuant to §63.1213, the permittee may request an extension of the compliance date to install pollution prevention or waste minimization controls provided that the conditions outlined in this section are met.
81. Pursuant to §19.401 of Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), the permittee shall submit an application for air permit modification, if necessary, based upon the results of the chemical destructor trial burn. The application shall include complete test results, calculations, and emission rates for all criteria and non-criteria pollutants emitted at the chemical destructor.

Solvent Recovery: 4PSR-00 and SR-FUG

Process Description

Arkansas Eastman operates dedicated Solvent Recovery equipment to recover solvents that become contaminated during the manufacturing processes. Individual streams from the chemical manufacturing processes are transferred to storage tanks in the solvent recovery area. These streams are pumped to a pH adjustment system and then to a series of distillation columns. After distillation, the solvents are reused in the manufacturing processes or are sold for other uses.

Specific Conditions

82. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr
4PSR-00	Solvent Recovery Bubble	VOC	27.9
SR-FUG	Solvent recovery Fugitives	VOC	12.7

83. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 70.6, the permittee shall not process more than 40 million pounds per year of VOC solvents at the solvent recovery facility.
84. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall keep monthly records of the amount of solvent throughput at 4PSR-00. These records shall be kept on site and made available upon request.
85. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and A.C.A. §8-4-203 as referenced §8-4-304 and §8-4-311, the permittee shall maintain a scrubber liquor flow rate in scrubbers 4P02-01 and 4P94-02 in accordance with the Facility Operating Plan dated February 21, 2002 at the solvent recovery facility.
86. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall keep daily records of the liquor flow rate at scrubbers 4P02-01 and 4P94-02. These records shall be kept on site and made available upon request.

Wastewater Treatment Facility: 7K01-01 and 7M01-02

Process Description

The Wastewater Treatment Plant at Arkansas Eastman services continuous wastewater influent from various areas of the plant, as well as incidental and storm water wastewater streams. Its design consists of traditional earthen basins except for the two equalization tanks and a diversion tank.

Specific Conditions

87. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr
7K01-01	Wastewater Treatment	VOC	45.7
7M01-02	Wastewater Decant Tank	VOC	0.8

88. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr
7K01-01	Wastewater Treatment	Total HAPs**	45.7

**Hazardous Air Pollutants include all compounds so designated by Section 112(b)(1) of the Clean Air Act. Plantwide Hazardous Air Pollutant emissions are limited in Plantwide Conditions 8, 10 and 11.

89. Pursuant to §19.703 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and 40 CFR Part 52 Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall calculate the emissions of VOC from the wastewater basins (7K01-01) using a Department or EPA approved model once per quarter. Annual emissions shall be based on the most recent twelve consecutive months of operation.

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Polymer Production Facility: 5NPOLY-TNK, 5N07-04, and POLY-FUG

Process Description

This process produces a solid polymer from a variety of solid and liquid reactants that react in solution with solvent. Emissions from this process are mainly VOCs. These VOCs are routed to the RTOs or other control devices. Only a few storage tanks, loading/unloading stations, and waste dumpsters vent directly to the atmosphere.

Fugitive emissions are estimated based on components and published emission leak rate factors. These factors are based on Eastman's monitoring data and the resulting leak frequency determination.

Specific Conditions

90. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr
5NPOLY-TNK	Polymer Tank Bubble	VOC	4.7
POLY-FUG	Polymer Fugitives	VOC	1.8

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Isopropyl Benzene Production (DIPB): 5NDIPB-TNK, 5N03-52, 5N03-54, 5Q94-01, and DIPB-FUG

Process Description

The isopropyl benzene process consists of alkylation of benzene with propylene. A catalyst is used to promote the reaction. The intermediate, cumene, reacts with propylene to produce three isopropyl benzene variations. Subsequent to the reaction, the catalyst is removed by washing and decanting. Any benzene or intermediate generated that is not fully converted to product is recycled back into the process. 5N03-48 and 5N03-55 are scrubbers associated with the DIPB process.

NSPS Subpart VV (SOCMI VOC Equipment Leaks) applies to certain equipment installed after 1/5/81. Cumene is produced in this area. Therefore, this regulation is applicable.

NESHAP Subpart J (Equipment Leaks of Benzene) applies to certain equipment in benzene service. Affected equipment does exist at the DIPB plant. Therefore, this regulation is applicable. This regulation requires affected facilities to comply with the requirements contained in NESHAP Subpart V (Equipment Leaks of VHAP).

NESHAP Subpart Y (Benzene Storage Vessels) applies to storage tank #T-210. A flare (5N03-54) controls emissions from this tank.

NESHAP Subpart FF (Benzene Waste Operations) applies to benzene waste streams at certain facilities, including chemical manufacturing plants. It is applicable to the DIPB plant. A flare (5N03-54) controls benzene emissions generated by the wastewater collection tank (T-9) and the wastewater steam stripper (D-9).

Specific Conditions

91. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. These rates are based on maximum physical capacity of the equipment, therefore no compliance demonstration is necessary.

PES #	Description	Pollutant	lb/hr
5NDIPB-TNK	DIPB Tank Bubble	VOC	0.5
5N03-52	Tank	VOC	0.4
5N03-54	Flare	PM ₁₀	0.1

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PES #	Description	Pollutant	lb/hr
		SO ₂	0.1
		VOC	0.9
		CO	0.4
		NO _x	1.4
5Q94-01	Tank	VOC	0.4
DIPB-FUG	DIPB Fugitives	VOC	5.7

92. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr
5N03-48	Scrubber	Inorganics*	0.1
		Total HAPs**	0.1
5N03-54	Flare	PM	0.1
5N03-55	Scrubber	Inorganics*	0.1
		Total HAPs**	0.1

*Inorganics are considered to be non-VOC Hazardous Air Pollutants.

**Hazardous Air Pollutants include all compounds so designated by Section 112(b)(1) of the Clean Air Act. Plantwide Hazardous Air Pollutant emissions are limited in Plantwide Conditions 8, 10 and 11.

93. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall operate 5N03-55 in accordance with the Facility Operating Plan dated February 21, 2002.
94. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall keep records of the weekly inspections on scrubber 5N03-55 on site and available for inspection upon request.
95. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall operate and maintain a control system on scrubber 5N03-48 in accordance with the Facility Operating Plan dated February 21, 2002.

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96. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall operate a control system which detects the presence of a flame on the flare (5N03-54) and gives an alarm if flame is not detected. The reactor process shall be shut down if the cause of the alarm is not corrected within 30 minutes.
97. Pursuant to 40 CFR Part 60.18, NSPS Subpart A – General Provisions, the permittee shall operate and monitor the DIPB off-gas flare (5N03-54) according to the requirements of §60.18(d), (e), and (f). Records shall be kept of all periods of operation during which the flare pilot flame is absent.
98. Pursuant to 40 CFR Part 61, Subpart FF - NESHAP for Benzene Waste Operations, the permittee shall comply with all applicable benzene waste stream reporting requirements at the flare (5N03-54) (which controls benzene emissions generated by the wastewater steam stripper) of all applicable waste stream records as outlined by §61.356(b), and as outlined by §61.357(c).
99. Pursuant to 40 CFR Part 61.340(a), Subpart FF - NESHAP for Benzene Waste Operations, provisions of the subpart apply to chemical manufacturing plants.
100. Pursuant to 40 CFR Part 61.340(c), 61.342(a), 61.342(c)(2), 61.342(c)(3), Subpart FF - NESHAP for Benzene Waste Operations, 61.340(c) identifies wastes exempt from the regulatory requirements. The permittee may claim exemptions under 61.342(c)(2) and 61.342(c)(3) providing documentation is kept to support the exemptions identified.
101. Pursuant to 40 CFR Part 61.342(a)(1) through (4), Subpart FF - NESHAP for Benzene Waste Operations, the permittee may claim exemptions as allowed in 61.342(a)(1) through (4), providing documentation of the benzene waste quantity is calculated as specified for the exemption.
102. Pursuant to 40 CFR Part 61.342(c)(1)(i), Subpart FF - NESHAP for Benzene Waste Operations, the permittee has elected to remove or destroy benzene in the waste using a treatment process or wastewater treatment system which complies with 61.348 (Treatment Processes)
103. Pursuant to 40 CFR Part 61.342(c)(1)(ii), Subpart FF - NESHAP for Benzene Waste Operations, the permittee shall comply with the standards specified in 61.343 through 61.347, as applicable, for each waste management unit.

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104. Pursuant to 40 CFR Part 61.342(d), (e), and (f), Subpart FF - NESHAP for Benzene Waste Operations, the permittee may elect to meet one of these additional compliance options identified in the citations noted. Subpart FF does not require prior approval for changing between options. The permittee may choose between compliance options as long as documentation is readily available for inspection to provide evidence of compliance with the applicable treatment standard.
105. Pursuant to 40 CFR Part 61.342(g), Subpart FF - NESHAP for Benzene Waste Operations, compliance with this subpart will be determined by review of facility records and results from tests and inspections using methods and procedures specified in 61.355.
106. Pursuant to 40 CFR Part 61, Subpart J and Subpart V, the permittee shall comply with all applicable requirements in this subpart at all applicable sources in the DIPB process. The provisions of this subpart apply to each of the following sources that are intended to operate in benzene service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended lines, valves, flanges, and other connectors, product accumulator vessels, and control devices or systems required by these subparts.
107. Pursuant to 40 CFR Part §60.480, Subpart VV – Standards of Performance for Equipment Leaks of VOC in SOCM, the permittee shall comply with the requirements of 40 CFR §60.480 through §60.485 for SOCM chemicals produced, as intermediates or final products, by process units covered under this subpart, and listed in §60.489.
108. Pursuant to 40 CFR Part §60.486 and §60.487, Subpart VV – Standards of Performance for Equipment Leaks of VOC in SOCM, the permittee shall follow the recordkeeping and reporting procedures for equipment leaks as outlined under §60.486 and §60.487.
109. Pursuant to 40 CFR Part §60.483-1 and §60.483-2, Subpart VV – Standards of Performance for Equipment Leaks of VOC in SOCM, the permittee may comply with one of the alternative means of compliance identified in §60.483-1 and §60.483-2.
110. Pursuant to 40 CFR Part §61.110(a), NESHAP J – National Emission Standard for Equipment Leaks (Fugitive Emission Sources of Benzene), applies to equipment in benzene service including: pumps, valves, flanges, compressors, pressure relief devices, sampling connections, open-ended valves or lines, other connectors, product accumulation vessels, and control devices or systems required by the subpart.

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111. Pursuant to 40 CFR Part §61.112(a), NESHAP J – National Emission Standard for Equipment Leaks (Fugitive Emission Sources of Benzene), each owner or operator subject to the provisions of this subpart shall comply with the provisions of NESHAP, Subpart V.
112. Pursuant to 40 CFR Part §61.112(b), NESHAP J – National Emission Standard for Equipment Leaks (Fugitive Emission Sources of Benzene), the owner/operator may elect to comply with the provisions of 61.243-1 and 1.243-2.
113. Pursuant to 40 CFR Part §61.240 through 61.247, NESHAP V – National Emission Standard for Equipment Leaks, Pursuant to 40 CFR 61, Subpart V, the permittee shall comply with all applicable parts of sections 61.240 through 61.247.
114. Pursuant to 40 CFR Part §61.270, NESHAP Y – National Emission Standard for Benzene Storage Vessels, defines applicability and designation of sources and defines exemptions. The condition applies to Tank T-210 which is vent to the DIPB flare (5N03-54).
115. Pursuant to 40 CFR Part §61.271(c), NESHAP Y – National Emission Standard for Benzene Storage Vessels, the storage vessel shall be equipped with a closed vent system and flare control device meeting the specifications of 61.271(d).
116. Pursuant to 40 CFR Part §61.271(d), NESHAP Y – National Emission Standard for Benzene Storage Vessels, the closed vent system and flare shall meet the requirements as specified for general control devices in 40 CFR §60.18(e) and (f).
117. Pursuant to 40 CFR Part §61.271(c)(4), NESHAP Y – National Emission Standard for Benzene Storage Vessels, the specifications and requirements of 61.271(c)(1) and (2) do not apply during a control system malfunction.
118. Pursuant to 40 CFR Part §61.275(e), NESHAP Y – National Emission Standard for Benzene Storage Vessels, excess emissions shall be reported as specified in this paragraph.
119. Pursuant to 40 CFR Part §61.276(a), NESHAP Y – National Emission Standard for Benzene Storage Vessels, the owner/operator shall keep copies of all reports and records required by this subpart.
120. Pursuant to 40 CFR Part §61.276(b), NESHAP Y – National Emission Standard for Benzene Storage Vessels, the permittee shall keep readily assessable records showing the dimensions of the storage vessel and an analysis of the capacity. Each

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storage vessel with a design capacity of less than 10,000 gallons is subject to no provisions of this subpart other than this requirement.

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Storage Tanks and Miscellaneous Sources: 5N03TK-01, 6N01-02, 6N01-03, and 7N02-01

Process Description

Arkansas Eastman Division is a manufacturer of organic chemical intermediates. The primary business opportunities for this facility are producing chemicals that are put into the marketplace quickly. Therefore, many different chemicals can be manufactured in the multi-purpose batch equipment.

Because of the changing nature of process chemistry and the marketplace needs, Arkansas Eastman Division uses a variety of tanks for storage of raw materials, intermediates, and final products. There are no specific controls on the tanks besides conservation vents.

Eastman maintains and uses a cement plant on site for construction purposes. Emissions (PM/PM₁₀) are controlled by the use of a fabric filter (PES # 7N02-01).

PES # (emission point)	Tank ID	Control Device	Applicable Federal Regulation
4P94-12	PR-56A	conservation vent	None
4P94-13	PR-56B	conservation vent	None
5N01-22	TFV-1	conservation vent	None
5N01-23	TFV-5	conservation vent	None
5N01-25	TFV-3	conservation vent	None
5N01-26	TFV-6	conservation vent	None
5N01-27	TFV-4	conservation vent	None
5N01-31	TFS-2	conservation vent	None
5N01-32	TFS-1	conservation vent	None
5N01-35	TFS-5	conservation vent	None
5N01-36	TFS-7	conservation vent	None
5N01-37	TFS-10	conservation vent	None
5N01-39	TF-3	conservation vent	None

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PES # (emission point)	Tank ID	Control Device	Applicable Federal Regulation
5N01-41	TF-7	conservation vent	None
5N01-42	TF-6	conservation vent	None
5N01-44	TF-2	conservation vent	None
5N01-48	WG-1	conservation vent	None
5N01-49	CG-1	conservation vent	None
5N03-18	PBV-50	conservation vent	None
5N03-31	AA-52	seal pot	None
5N03-32	TL-52	conservation vent	None
5N03-33	BS-53	seal pot	None
5N03-38	TF-8	conservation vent	None
5N03-39	TF-10	conservation vent	None
5N03-40	TF-11	conservation vent	None
5N03-43	TF-13	conservation vent	NSPS-Kb
5N03-45	TF-12	conservation vent	None
5N03-50	PA-50	conservation vent	NSPS-Kb
5N07-03	PDA-155	conservation vent	None
	SR-52	conservation vent	None
	TFS-9	conservation vent	None
	TFS-79	conservation vent	None
	BS-55R	conservation vent	None
	SR-50	conservation vent	None
	SR-70	conservation vent	None

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121. Pursuant to §19.501 et seq of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. These rates are based on maximum physical capacity.

PES #	Description	Pollutant	lb/hr
5N03TK-01	Tank Bubble	VOC	8.0
6N01-02	Tank	VOC	0.1
6N01-03	Tank	VOC	1.4
7N02-01	Fabric Filter	PM ₁₀	0.3

122. Pursuant to §18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, permittee shall not exceed the emission rates set forth in the following table.

PES #	Description	Pollutant	lb/hr
7N02-01	Fabric Filter	PM	0.3

123. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, hours of operation of source 7N02-01 fabric filter, during bulk cement deliveries, shall not exceed 300 hours during any consecutive 12 month period. The permittee shall keep records sufficient to verify compliance with this condition. These records shall be updated monthly within 30 days after each 12 month period.

Acrylic Resins Process

Process Description

The Acrylic Resins Process is operated in three units using a monomer feed tank, polymerization unit, and flaker feed tank. Solvent is charged to the polymerization unit and heated to the process temperature. Monomers and initiators are charged to the monomer feed tank. Monomers are then continuously fed from the monomer feed tank over a period of time with the temperature maintained during the addition through cooling of the polymerization unit.

Following polymerization, steam is sparged to the polymerization unit to remove solvent. The resulting molten polymer is transferred to the flaker feed tank for final packaging via flaking and bagging.

All non-fugitive VOCs from the Acrylic Resins process are routed to the regenerative thermal oxidizers (RTOs, SN-5N09-01). Particulate emissions are controlled by a baghouse (5N07-06).

Specific Conditions

124. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	ton/yr
5N07-06	Acrylic Resin Bagging System	PM ₁₀	0.09	0.40
5N07-FUG	Acrylic Resin Fugitives	PM ₁₀ VOC	0.13 0.27	0.58 1.17

125. Pursuant to §18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	ton/yr
5N07-06	Acrylic Resin Bagging System	PM	0.09	0.40

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SN	Description	Pollutant	lb/hr	ton/yr
5N07-FUG	Acrylic Resin Fugitives	PM	0.13	0.58
		Xylene	0.56	0.56
		Styrene	<0.01	<0.01
		Acrylic Acid	0.14	0.14

126. Pursuant to §18.501 of the Arkansas Air Pollution Control Code (Regulation 18), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed 5% opacity at SN-5N07-06.
127. Pursuant to §19.303 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall be limited to 13,000,000 pounds of acrylic product per rolling 12-month period at the Acrylic Resins Process. The baghouse (SN-5N07-06) is not limited exclusively to Acrylic Resins materials and shall be allowed to operate at 8760 hours per year.
128. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall keep records to show compliance with the 12-month acrylic product limit established in the previous condition. These records shall be updated monthly, kept on site, and made available to Department personnel upon request.

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SECTION V: COMPLIANCE PLAN AND SCHEDULE

Arkansas Eastman is in compliance with the applicable regulations cited in the permit application. Arkansas Eastman will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. Pursuant to §19.704 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
2. Pursuant to §19.410(B) of Regulation 19, 40 CFR Part 52, Subpart E, the Director may cancel all or part of this permit if the construction or modification authorized herein is not begun within 18 months from the date of the permit issuance or if the work involved in the construction or modification is suspended for a total of 18 months or more.
3. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
4. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
 1. Sampling ports adequate for applicable test methods
 2. Safe sampling platforms
 3. Safe access to sampling platforms
 4. Utilities for sampling and testing equipment
5. Pursuant to §19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.

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6. Pursuant to Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit subsumes and incorporates all previously issued air permits for this facility.
7. Pursuant to §19.501 et seq of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, the permittee shall not exceed the following emission rates at the facility during any consecutive 12 month period.

Utilities Area Only		
PES #	Pollutant	ton/yr
6M01-01 Coal Fired Boilers	PM/PM ₁₀	205.3
	SO ₂	6,213.8
	VOC	2.3
	CO	1,683.7
	NO _x	488.2
6M01-01A	PM/PM ₁₀	0.1
6M06-01 #4 Boiler	PM/PM ₁₀	4.8
	SO ₂	5.3
	VOC	2.0
	CO	12.3
	NO _x	58.3
6M07-01 #5 Boiler	PM/PM ₁₀	4.9
	SO ₂	0.6
	VOC	12.7
	CO	78.8
	NO _x	96.4

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Plantwide Limits	
Pollutant	ton/yr
PM/PM ₁₀	340.3
SO ₂	6,308.1
VOC	715.2
CO	1,849.7
NO _x	787.8

8. Pursuant to §18.801 of the Arkansas Air Pollution Control Code (Regulation 18), and A.C.A §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the following emission rates at the facility during any consecutive 12 month period.

Pollutant	ton/yr
Inorganics*	940.0
Total HAPs**	998.4

*Inorganic Compounds include non-VOC HAPs.

**Include all compounds designated as Hazardous Air Pollutants by Section 112 of the Clean Air Act.

9. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19) and 40 CFR Part 52 Subpart E, §18.1004 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records to demonstrate compliance with the criteria emission limits in Plantwide Condition 7. The emission records shall be recalculated monthly, and shall be based upon a 12-month rolling total. The records shall be updated by the last day of the month following the recorded 12-month period, and shall be kept on site and made available for inspection upon request.
10. Pursuant to §18.1004 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall determine the monthly emissions of each non-criteria air pollutant by material balance. This determination shall include each inorganic contaminant and each Hazardous Air Pollutant (HAP), as designated by Section 112 of the Clean Air Act. The material balance shall be recalculated monthly, and shall be based upon a 12-month rolling total. The records shall be updated by the last day of the

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month following the recorded 12-month period, and shall be kept on site and made available for inspection upon request.

11. Pursuant to §18.1004 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall use the emissions determined from Plantwide Condition 10 to show compliance with the Department's Non-Criteria Air Pollutant Control Strategy. The permittee shall calculate the site-specific 30-day Presumptively Acceptable Emission Rate (PAER) for each non-criteria pollutant emitted at the facility using the equation presented below.

This determination shall include each inorganic contaminant and each Hazardous Air Pollutant (HAP), as designated by Section 112 of the Clean Air Act. The permittee shall not emit more than the calculated 30-day PAER during any consecutive 30-day period. The permittee shall maintain on-site records of the emissions rates and the calculated 30-day site-specific PAER (lb/month) for each non-criteria pollutant emitted. These records shall be made available for inspection upon request.

Allowable site-specific PAER (lb/month) = $0.88 \times (\text{TLV in mg/m}^3 \text{ from ACGIH}) \times 720$

Any exceedance of the site-specific PAER shall be reported to the Department within 24 hours of such discovery. A full report of the exceedance and subsequent corrective action shall be submitted to the Department within 5 business days.

The permittee shall review and update the TLV values used for each compound at least once annually, according to the most recent edition of the ACGIH *Threshold Limit Values for Chemical Substances and Physical Agents*.

12. Pursuant to 40 CFR 52.21, this facility is a major stationary source as defined by 40 CFR 52.21. Any physical change or change in the method of operation which results in a significant emission increase, as defined by 40 CFR 52.21, shall require prior approval of a PSD netting exercise or a PSD permit before the event taking place, regardless of the plantwide emission rate.
13. Pursuant to 40 CFR §60.110b, Subpart Kb, the permittee shall maintain documentation necessary to determine compliance with the applicability of this subpart for all storage vessels having a capacity of greater than or equal to 40 cubic meters (10,567 gallons). Affected tanks include the following:

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TF-13 (SN-5N03-43)	PB-52	T-241	FAA-TF-01
WB-06 (SN-6M-03-08)	PM-50A	PA-50	FAA-TF-02
WB-07 (SN-6M-03-09)	PM-50B	T-270	FAA-TF-101
WB-08 (SN-6M-03-10)	TBA-100	RA-TF-01	FAA-TF-102
WB-09 (SN-6M-03-11)	4P94-11	EX-TF-01	PROD-TF-02
TFS-60	T-280 (SN-5N03-51)	EX-TF-02	PROD-TF-15
PT-60	T-265 (SN-5N03-53)	EX-TF-03	PROD-TF-302
PT-68	T-251	AP-100	RA-TF-01
PT-69A	T-220	AA-100	RA-TF-02
PT-69B	T-211A	TBA-75	SPS-TF-04
PB-51	T-211B	RNS-100	SPS-TF-204

14. Pursuant to 40 CFR §60.112b, Subpart Kb, the permittee shall maintain documentation identifying storage vessels complying with the requirements of 40 CFR §60.112b, including emission controls used, and all documentation to support compliance with the emission control used.
15. Pursuant to 40 CFR §60.112b(a)(3), Subpart Kb, the permittee shall meet the specifications of this citation for closed vent systems and control devices used for tank emission abatement.
16. Pursuant to 40 CFR §60.113b, Subpart Kb, the permittee shall comply with all applicable testing and procedures as identified in §60.113b. The applicable requirement for a particular storage vessel depends on the control equipment installed to meet the requirements of §60.112b.
17. Pursuant to 40 CFR §60.113b(c), Subpart Kb, each closed vent system and control device (other than a flare) is exempt from §60.8 of the General Provisions and shall comply with the requirements specified in this citation.
18. Pursuant to 40 CFR §60.113b(d)(2) and (3), Subpart Kb, closed vent systems with flares shall comply with the requirements as specified in §60.18(e) and (f). Records shall be kept of all periods of operation during which the flare pilot flame is absent and shall be reported semiannually.
19. Pursuant to 40 CFR §60.115b, Subpart Kb, the permittee shall keep records and furnish reports as required, depending upon the control equipment installed, to meet the requirements of §60.112b. Copies of operating plans shall be kept for the life of the control equipment.

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20. Pursuant to 40 CFR §60.116b, Subpart Kb, the permittee shall keep copies of all records required by this section.
21. Pursuant to 40 CFR §60.116b(g), Subpart Kb, each storage vessel equipped with a closed vent system and control device meeting the specifications of §60.112b is exempt from the requirements of paragraphs (c) and (d) of §60.116b.
22. Pursuant to §19.705 of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), 40 CFR Part 52 Subpart E, §18.1004 of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall be allowed a 120 day phase-in period to fully comply with certain monitoring, record keeping, and reporting provisions of this permit. The 120 day phase-in period shall commence upon the issuance date of Air Permit 1085-AOP-R0. The phase-in period shall only apply to the provisions of the following conditions:

Specific Conditions 3, 5, 6, 7, 13, 21, 23, 24, 28, 58, 71, 84, 85, 86, 87, 90, 94, 95, and 96, and Plantwide Conditions 9, 10 and 11.

This phase-in period shall not apply to any federal regulatory provisions, such as those required by any NSPS or NESHAP regulation.

23. Pursuant to §18.1004 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall submit a compliance certification with state-only enforceable terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be submitted annually to the Department. All compliance certifications required by this permit shall include the following:
 1. The identification of each term or condition of the permit that is the basis of the certification;
 2. The compliance status;
 3. Whether compliance was continuous or intermittent;
 4. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 5. Such other facts as the Department may require elsewhere in this permit.

This compliance certification may be in the same format as, and may be included with, the annual compliance certification required by General Provision 21.

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Permit Shield

24. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included and specifically identified below:

The following have been specifically identified as applicable requirements based upon the information submitted by the permittee in an application dated May 3, 1996.

Source (SN)	Regulation	Description
6M07-01	40 CFR Part 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

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Source (SN)	Regulation	Description
TF-13 (SN-5N03-43) WB-06 (SN-6M-03-08) WB-07 (SN-6M-03-09) WB-08 (SN-6M-03-10) WB-09 (SN-6M-03-11) TFS-60 PT-60 PT-68 PT-69A PT-69B PB-51 PB-52 PM-50A PM-50B TBA-100 4P94-11 T-280 (SN-5N03-51) T-265 (SN-5N03-53) T-251 T-220 T-211A T-211B T-241 PA-50 T-270 RA-TF-01 EX-TF-01 EX-TF-02 EX-TF-03 AP-100 AA-100 TBA-75 RNS-100 FAA-TF-01 FAA-TF-02 FAA-TF-101 FAA-TF-102 PROD-TF-02 PROD-TF-15 PROD-TF-302 RA-TF-01 RA-TF-02 SPS-TF-04 SPS-TF-204	40 CFR Part 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Utilities Section (coal processing activities).	40 CFR Part 60 Subpart Y	Standards of Performance for Coal Preparation Plants

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Source (SN)	Regulation	Description
Organic Sulfonation Section. DIPB Production. (Equipment Leaks)	40 CFR Part 60 Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry
5M01-02	40 CFR Part 60 Subpart NNN	Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations
DIPB Production (equipment Leaks, benzene)	40 CFR Part 61 Subpart J	National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene
DIPB Production (equipment leaks, VHAP)	40 CFR Part 61 Subpart V	National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Tank T-210 (benzene vessel)	40 CFR Part 61 Subpart Y	National Emission Standard for Benzene Emissions from Benzene Storage Vessels
DIPB Production T9, D9 (benzene waste streams).	40 CFR Part 61 Subpart FF	National Emission Standard for Benzene Waste Operations
Facility (waste management/recovery operations).	40 CFR Part 63 Subpart DD	National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations
6M03-05	40 CFR Part 63 Subpart EEE	National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors

Title VI Provisions

25. The permittee shall comply with the standards for labeling of products using ozone depleting substances pursuant to 40 CFR Part 82, Subpart E:
- a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c. The form of the label bearing the required warning must comply with the

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requirements pursuant to §82.110.

- d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
26. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC-like appliance” as defined at §82.152.)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
27. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
28. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the

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system used on passenger buses using HCFC-22 refrigerant.

29. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

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SECTION VII: INSIGNIFICANT ACTIVITIES

Pursuant to §26.304 of Regulation 26, the following sources are insignificant activities. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §304 of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated March 1997.

Source #	Description	Basis of Insignificance
5N01-63	Storage Tank (Organic Chemical Intermediate Process)	Group A, Number 3
5N01-64	Storage Tank (Organic Chemical Intermediate Process)	Group A, Number 3
6N02-01	Storage Tank (Utilities Process)	Group A, Number 4
6N02-02	Storage Tank (Utilities Process)	Group A, Number 13
5M01-03	Vacuum System (Organic Sulfonation Process)	Group A, Number 13
5M03-06	Vacuum System (Organic Sulfonation Process)	Group A, Number 13
5M11-03	Vacuum System (Organic Sulfonation Process)	Group A, Number 13
5M11-08	Vents (Organic Sulfonation Process)	Group A, Number 13
5M11-09	Vents (Organic Sulfonation Process)	Group A, Number 13
5M11-10	Vents (Organic Sulfonation Process)	Group A, Number 13
5M11-13	Truck Loading (Organic Sulfonation Process)	Group A, Number 13
5M11-14	Hold Bin (Organic Sulfonation Process)	Group A, Number 13
5M04-04	Storage Tank (Organic Sulfonation Process)	Group A, Number 4
5M04-07	Storage Tank (Organic Sulfonation Process)	Group A, Number 4
5M04-03	Storage Tank (Organic Sulfonation Process)	Group A, Number 13
5M04-09	Storage Tank (Organic Sulfonation Process)	Group A, Number 13
6M03-15	Storage Tank (Chemical Destruction Process)	Group A, Number 4
4P02-02	Quenching (Solvent Recovery Process)	Group A, Number 13
4P94-04	Storage Tank (Solvent Recovery Process)	Group A, Number 13
5N01-58	Extractor (Solvent Recovery Process)	Group A, Number 13
4P94-03	Storage Tank (Solvent Recovery Process)	Group A, Number 4
7M01-03	Storage Tank (Wastewater Treatment Process)	Group A, Number 4
7M01-04	Dumpster (Wastewater Treatment Process)	Group A, Number 4

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Source #	Description	Basis of Insignificance
5N03-46	Unloading Station (Isopropyl Benzene Process)	Group A, Number 13
5N03-47	Unloading Station (Isopropyl Benzene Process)	Group A, Number 13
6N01-01	Storage Tank (Storage Tank Process)	Group A, Number 3
5N03-39	Storage Tank (Storage Tank Process)	Group A, Number 4
5N03-40	Storage Tank (Storage Tank Process)	Group A, Number 4
5N01-41	Storage Tank (Storage Tank Process)	Group A, Number 13
5N01-42	Storage Tank (Storage Tank Process)	Group A, Number 13
5N02-01	Storage Tank (Storage Tank Process)	Group A, Number 13
5N02-02	Storage Tank (Storage Tank Process)	Group A, Number 13
	Caustic Tank (CL-01R)	Group A, Number 4
5N03-63	Storage Tank (Organic Chemical Intermediate Process)	Group A, Number 3
4P03-05	Kilo Lab	Group A, Number 5

Pursuant to §26.304 of Regulation 26, the emission units, operations, or activities contained in Regulation 19, Appendix A, Group B, have been determined by the Department to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

SECTION VIII: GENERAL PROVISIONS

1. Pursuant to 40 CFR 70.6(b)(2), any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. Pursuant to 40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective August 10, 2000, this permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later.
3. Pursuant to §26.406 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due.
4. Pursuant to 40 CFR 70.6(a)(1)(ii) and §26.701(A)(2) of Regulation #26, where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.
5. Pursuant to 40 CFR 70.6(a)(3)(ii)(A) and §26.701(C)(2) of Regulation #26, records of monitoring information required by this permit shall include the following:
 1. The date, place as defined in this permit, and time of sampling or measurements;
 2. The date(s) analyses were performed;

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3. The company or entity that performed the analyses;
 4. The analytical techniques or methods used;
 5. The results of such analyses; and
 6. The operating conditions existing at the time of sampling or measurement.
6. Pursuant to 40 CFR 70.6(a)(3)(ii)(B) and §26.701(C)(2)(b) of Regulation #26, records of all required monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. 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 this permit.
7. Pursuant to 40 CFR 70.6(a)(3)(iii)(A) and §26.701(C)(3)(a) of Regulation #26, the permittee shall submit reports of all required monitoring every 6 months. If no other reporting period has been established, the reporting period shall end on the last day of the anniversary month of this permit. The report shall be due within 30 days of the end of the reporting period. Even though the reports are due every six months, each report shall contain a full year of data. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as defined in §26.2 of Regulation #26 and must be sent to the address below.

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

8. Pursuant to 40 CFR 70.6(a)(3)(iii)(B), §26.701(C)(3)(b) of Regulation #26, and §19.601 and 19.602 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
1. The facility name and location,
 2. The process unit or emission source which is deviating from the permit limit,
 3. The permit limit, including the identification of pollutants, from which deviation occurs,
 4. The date and time the deviation started,
 5. The duration of the deviation,
 6. The average emissions during the deviation,
 7. The probable cause of such deviations,

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8. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
9. The name of the person submitting the report.

A full report shall be made in writing to the Department within five (5) business days of discovery of the occurrence and shall include in addition to the information required by initial report a schedule of actions to be taken to eliminate future occurrences and/or to minimize the amount by which the permits limits are exceeded and to reduce the length of time for which said limits are exceeded. If the permittee wishes, they may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence and such report will serve as both the initial report and full report.

9. Pursuant to 40 CFR 70.6(a)(5) and §26.701(E) of Regulation #26, and A.C.A. §8-4-203, as referenced by §8-4-304 and §8-4-311, if any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable.
10. Pursuant to 40 CFR 70.6(a)(6)(i) and §26.701(F)(1) of Regulation #26, the permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation #26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Any permit noncompliance with a state requirement constitutes a violation of the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) and is also grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
11. Pursuant to 40 CFR 70.6(a)(6)(ii) and §26.701(F)(2) of Regulation #26, 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.
12. Pursuant to 40 CFR 70.6(a)(6)(iii) and §26.701(F)(3) of Regulation #26, 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.
13. Pursuant to 40 CFR 70.6(a)(6)(iv) and §26.701(F)(4) of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.

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14. Pursuant to 40 CFR 70.6(a)(6)(v) and §26.701(F)(5) of Regulation #26, the permittee shall furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may be required to furnish such records directly to the Administrator along with a claim of confidentiality.
15. Pursuant to 40 CFR 70.6(a)(7) and §26.701(G) of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.
16. Pursuant to 40 CFR 70.6(a)(8) and §26.701(H) of Regulation #26, 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 elsewhere in this permit.
17. Pursuant to 40 CFR 70.6(a)(9)(i) and §26.701(I)(1) of Regulation #26, if the permittee is allowed to operate under different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which the facility or source is operating.
18. Pursuant to 40 CFR 70.6(b) and §26.702(A) and (B) of Regulation #26, all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act unless the Department has specifically designated as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.
19. Pursuant to 40 CFR 70.6(c)(1) and §26.703(A) of Regulation #26, any document (including reports) required by this permit shall contain a certification by a responsible official as defined in §26.2 of Regulation #26.
20. Pursuant to 40 CFR 70.6(c)(2) and §26.703(B) of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:
 1. Enter upon the permittee's premises where the permitted source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;

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2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 4. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements.
21. Pursuant to 40 CFR 70.6(c)(5) and §26.703(E)(3) of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:
1. The identification of each term or condition of the permit that is the basis of the certification;
 2. The compliance status;
 3. Whether compliance was continuous or intermittent;
 4. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 5. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and 504(b) of the Act.
22. Pursuant to §26.704(C) of Regulation #26, nothing in this permit shall alter or affect the following:
1. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 2. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 3. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
 4. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
23. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.

APPENDIX A
Applicable Federal Regulations

The source is subject to the regulations identified herein at the time of this permit issuance. The source must comply with the most recent version of these regulations as published in the Code of Federal Regulations. The source must comply with all applicable federal regulations, whether or not accurately and specifically identified in the appendix to this permit.

Regulations attached in this permit are for illustrative purposes only and are not deemed to be enforceable as attached unless the attached version is the most current and affective revision as cited and published in the CFR. Regardless of the form of the attached Subparts, the source is always subject to the most recent version of the Subparts. In addition, subsequent changes to the Subparts do not necessarily exempt the source from existing requirements in the air permit.

40 CFR Part 60
Subparts Db, Kb, Y, VV, NNN

40 CFR Part 61
Subparts J, V, Y, FF

40 CFR Part 63
Subparts DD, EEE