# OPERATING AIR PERMIT

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

Permit #: 544-AOP-R0

#### IS ISSUED TO:

Baxter Healthcare Corporation 1900 N. Hwy. 201 Mountain Home, AR 72653 Baxter County CSN: 03-0002

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:

June 17, 1999

and

June 16, 2004

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date Amended

#### SECTION I: FACILITY INFORMATION

PERMITTEE: CSN:	Baxter Healthcare Corporation 03-0002
PERMIT NUMBER:	544-AOP-R0
FACILITY ADDRESS:	1900 N. Hwy. 201 Mountain Home, AR 72653
COUNTY:	Baxter
CONTACT NAME: TELEPHONE NUMBER:	Ms. Carolyn Walker, Environmental Administrator (870) 424-5200
REVIEWING ENGINEER:	John Bailey
UTM North-South (X): UTM East-West (Y):	4023.75 555

#### SECTION II: INTRODUCTION

Baxter Healthcare Corporation (Baxter), previously known as Travenol Laboratories, Inc., operates a facility in Mountain Home, AR, which manufactures items used in the healthcare field (SIC 3081, 3089, and 3841).

Baxter manufactures capillary flow dialyzers (CF Dialyzers) (SN-04, SN-07), needles (SN-45 and SN-73), and DiaPES Dialyzers (SN-04 and SN-92). Most of the manufactured products are sterilized at the facility using ethylene oxide (EtO) (SN-11 through SN-15, SN-57, SN-58, SN-74 through SN-83, and SN-94).

The following changes, new sources, and sources previously not permitted are included in this permit:

The source SN-01 is removed from service;

Installation of a new boiler (SN-18);

The Needles Process (SN-45) that was not previously permitted. Facility proposes to install second needles grinder (SN-73);

The aeration rooms (SN-74 through SN-77) that were not previously permitted;

The sterilization chamber rear exhausts (SN-78 through SN-83) that were not previously permitted;

Marathon Filters (SN-46 and SN-84) were removed from service as of July, 1997; Two Bis(2-ethylhexyl)phthalate (DEHP) storage tanks (SN-89, SN-90) that were not previously permitted;

The DiaPES Dialyzer is proposed to be manufactured at the facility (SN-92);

The facility proposes to construct a new pallet treatment oven (kiln) (SN-91);

The pallet treatment oven (SN-93 and SN-99) that was not previously permitted;

The catalytic oxidizer (SN-94) to be constructed in order to comply with 40 CFR, Part 63, Subpart O;

The fugitive emissions (SN-95 through SN-97) that are supposed to be included in Title V permit.

Fuel oil tank (SN-100) that was not previously permitted.

The addition of a acid-water scrubber (SN-101)

The summary of the emissions from the facility is provided in the following table.

		EMISSION SUMMARY			
SN	Description	Pollutant	Emissio	on Rates	Cross
			lb/hr	tpy	Ref. Page
01	Bundle Centrifuge & Drum Cutter	Removed From Service	N/A	N/A	N/A
02	Capco Assembly Area	No Regulated Air Pollutants	N/A	N/A	19
03	Vacuum Dryers	No Regulated Air Pollutants	N/A	N/A	19
04	Orbital Centrifuge	VOC Methylene Chloride <sup>1</sup> 1,6-Hexamethylene	1.0 1.0	0.1 0.1	19
05		diisocyanate (HMXDI) <sup>2</sup>	0.08	0.1	
05	Orbital Centrifuge	Routed Through SN-04	N/A	N/A	N/A
06	Drum Cutter	Routed Through SN-01	N/A	N/A	N/A
07	Carbon Absorber C-1	VOC Freon 113	2.0 2.0	2.0 2.0	22
08	Pellet Cooler Discharge	Removed From Service	N/A	N/A	N/A
09	Filter Integrity Test Station Exhaust	VOC	6.9	0.1	25
10	Alcohol Storage Tanks	Removed From Service	N/A	N/A	N/A
11- 15	Sterilization Chamber Air Evacuation Exhaust	Ethylene Oxide <sup>3</sup>	0.0 4	0.0 4	27
16	35 MMBTU/HR Lasker Boiler	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \end{array}$	0.5 0.5 18.0 0.1 1.3 5.0	2.6 2.6 13.2 0.5 6.7 24.8	43

		EMISSION SUMMARY			
SN	Description	Pollutant	Emissio	on Rates	Cross
			lb/hr	tpy	Ref. Page
17	42 MMBTU/HR	PM	0.6	3.1	43
	Babcock & Wilcox	$\mathbf{PM}_{10}$	0.6	3.1	
	Boiler	$SO_2$	21.1	15.6	
		VOC	0.1	0.5	
		СО	1.5	7.6	
		NO <sub>x</sub>	6.0	29.5	
18	42 MMBTU/HR	PM	0.6	3.1	43
	Boiler #3	$\mathbf{PM}_{10}$	0.6	3.1	
		SO <sub>2</sub>	21.1	15.6	
		VOC	0.1	0.5	
		CO	1.5	7.6	
		$NO_x$	6.0	29.5	
19	Degreasing Unit	Removed From Service	N/A	N/A	N/A
20	Ultrasonic Degreaser Unit Freon TF	Removed From Service	N/A	N/A	N/A
21	Ovens for Needles	DEHP <sup>5</sup>	0.1	0.44	51
	Covers	HCl <sup>6</sup>	0.1	0.44	
22- 27	Ovens for Needles Covers	Routed through SN-21	N/A	N/A	N/A
28	Incinerator	Removed From Service	N/A	N/A	N/A
29- 40	Extruders	Removed From Service	N/A	N/A	N/A
41	Grinding Process	PM PM <sub>10</sub>	2.5 2.5	11.0 11.0	52
42	Pelletizer	Removed From Service	N/A	N/A	N/A
43	Procedyne Cleaner	Removed From Service	N/A	N/A	N/A

		EMISSION SUMMARY			
SN	Description	Pollutant	Emissio	on Rates	Cross
			lb/hr	tpy	Ref. Page
44	Paint Booth	VOC HAPs <sup>7</sup>	60 60	12.0 6.0	54
45	Grinder #1	PM PM <sub>10</sub> Chromium Compounds <sup>9</sup> Manganese Compounds <sup>9</sup>	0.1 0.1 0.017 0.0017	0.5 0.5 0.018 0.0018	56
46, 84	Marathon Filter Vapor Recovery System	Removed From Service	N/A	N/A	N/A
47	Bundle Centrifuge	Removed From Service	N/A	N/A	N/A
48	Capco Assembly Area	Removed From Service	N/A	N/A	N/A
49	Vacuum Dryer	Removed From Service	N/A	N/A	N/A
50	Urethane Dispenser	Removed From Service	N/A	N/A	N/A
51	Orbital Centrifuge	Removed From Service	N/A	N/A	N/A
52	Drum Cutter	Removed From Service	N/A	N/A	N/A
53	Phase V Freon System	Removed From Service	N/A	N/A	N/A
54	Pre-Heat Tunnel	Removed From Service	N/A	N/A	N/A
55	Alcohol Wash Centrifuge	Removed From Service	N/A	N/A	N/A
56	Dry Heat Oven	Removed From Service	N/A	N/A	N/A
57	Sterilization Chamber Air Evacuation Exhaust	Ethylene Oxide <sup>3</sup>	0.0 4	0.0 4	27
58 <sup>15</sup>	Ethylene Oxide Absorber Tower	VOC Ethylene Oxide <sup>3</sup> Ethylene Glycol <sup>3</sup>	1.1 1.1 0.32	1.0 1.0 0.016	27

	EMISSION SUMMARY					
SN	Description	Pollutant	Emissio	on Rates	Cross	
			lb/hr	tpy	Ref. Page	
58 <sup>14</sup>	Ethylene Oxide Absorber Tower	VOC Ethylene Oxide <sup>3</sup> Ethylene Glycol <sup>3</sup>	0.0	0.0	27	
59- 66	Resin Storage Silos	De Minimis Emission Sources	N/A	N/A	76	
67- 69	Water Chillers	De Minimis Emission Sources	N/A	N/A	76	
70, 71			N/A	N/A		
72	Jet Cleaner	DEHP <sup>5</sup>	0.03	0.1	58	
73	Grinder #2	PM PM <sub>10</sub> Chromium Compounds <sup>9</sup> Manganese Compounds <sup>9</sup>	0.1 0.1 0.017 0.0017	0.5 0.5 0.018 0.0018	56	
74- 77 <sup>13</sup>	Aeration Rooms #3, 4	VOC Ethylene Oxide <sup>3</sup>	1.2 1.2	5.0 5.0	27	
74, 77 <sup>14</sup>	Aeration Room #3 and 4	VOC Ethylene Oxide <sup>3</sup>	0.0 <sup>8</sup> 0.0 <sup>8</sup>	0.0 <sup>8</sup> 0.0 <sup>8</sup>	27	
78 <sup>15</sup>	150 lb Sterilization Chamber Rear Exhaust	VOC Ethylene Oxide <sup>3</sup>	11.0 11.0	2.0 2.0	27	
78 <sup>14</sup>	150 lb Sterilization Chamber Rear Exhaust	Ethylene Oxide <sup>3</sup>	0.0 8	0.0 8	27	
79 <sup>15</sup>	150 lb Sterilization Chamber Rear Exhaust	VOC Ethylene Oxide <sup>3</sup>	See SN-78	See SN-78	27	

		EMISSION SUMMARY			
SN	Description	Pollutant	Emissio	on Rates	Cross
			lb/hr	tpy	Ref. Page
79 <sup>14</sup>	150 lb Sterilization Chamber Rear Exhaust	Ethylene Oxide <sup>3</sup>	0.0 8	0.0 8	27
80 <sup>15</sup>	150 lb Sterilization Chamber Rear Exhaust	VOC Ethylene Oxide <sup>3</sup>	See SN-78	See SN-78	27
80 <sup>14</sup>	150 lb Sterilization Chamber Rear Exhaust	Ethylene Oxide <sup>3</sup>	0.0 8	0.0 8	27
81 <sup>15</sup>	150 lb Sterilization Chamber Rear Exhaust	VOC Ethylene Oxide <sup>3</sup>	See SN-78	See SN-78	27
81 <sup>14</sup>	150 lb Sterilization Chamber Rear Exhaust	Ethylene Oxide <sup>3</sup>	0.0 8	0.0 8	27
82 <sup>15</sup>	200 lb Sterilization Chamber Rear Exhaust	VOC Ethylene Oxide <sup>3</sup>	See SN-78	See SN-78	27
82 14	200 lb Sterilization Chamber Rear Exhaust	Ethylene Oxide <sup>3</sup>	0.0 8	0.0 8	27
83 <sup>15</sup>	200 lb Sterilization Chamber Rear Exhaust	VOC Ethylene Oxide <sup>3</sup>	See SN-78	See SN-78	27
83 <sup>14</sup>	200 lb Sterilization Chamber Rear Exhaust	Ethylene Oxide <sup>3</sup>	0.0 8	0.0 8	27

EMISSION SUMMARY					
SN	Description	Pollutant	Emissio	on Rates	Cross
			lb/hr	tpy	Ref. Page
85	Print Shop	VOC Methylene Chloride <sup>1</sup>	2.0 0.3	0.2 0.02	59
86	Chlorine Shed	Chlorine <sup>11</sup>	0.5	0.05	60
87	Isolex 300 Sets	De Minimis Emission Source	N/A	N/A	76
88	Ethylene Glycol Tanks	VOC Ethylene Glycol <sup>3</sup>	1.0 1.0	0.1 0.05	27
89	DEHP Storage Tank	VOC DEHP <sup>5</sup>	0.5 0.5	0.1 0.1	61
90	DEHP Storage Tank	VOC DEHP <sup>5</sup>	0.5 0.5	0.1 0.1	61
91	Pallet Treatment Kiln Chamber	PM PM <sub>10</sub> VOC CO NO <sub>x</sub>	0.1 0.1 11.2 0.1 0.5	0.1 0.1 1.1 0.1 0.1	62
92	Diapez Dialyzer Hot Wire Cutting	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO HAP <sup>12</sup>	0.1 0.1 0.1 0.1 0.1 0.1 0.1	0.5 0.5 0.5 0.5 0.5 0.5	64
93, 99	Pallet Treatment Oven	VOC	2.5	0.8	62

		EMISSION SUMMARY			
SN	Description	Pollutant	Emissio	on Rates	Cross
			lb/hr	tpy	Ref. Page
94	Sterilization Catalytic Oxidizer	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ VOC \\ CO \\ NO_x \\ Ethylene Oxide \end{array}$	$\begin{array}{c} 0.1 \\ 0.1 \\ 0.1 \\ 0.5^{15} \\ 0.2^{14} \\ 0.1 \\ 0.5 \\ 0.03^{15} \\ 0.15^{14} \end{array}$	$\begin{array}{c} 0.2 \\ 0.2 \\ 0.1 \\ 0.5 \\ ^{15} \\ 0.5 \\ ^{14} \\ 0.5 \\ 2 \\ 0.5 \\ ^{15} \\ 0.33 \\ ^{14} \end{array}$	27
95	Plastics Manufacturing	VOC DEHP <sup>5</sup>	2.0 1.21	8.9 4.57	66
96	Molding Process	De Minimis Emission Source	N/A	N/A	76
97	Plantwide VOC Fugitive Emissions	VOC Methyl Ethyl Ketone <sup>10</sup>	230.0 5.0	148.5 2.0	69
98	Needles Blasting	De Minimis Emission Source	N/A	N/A	76
100	Fuel #2 Storage Tank	VOC	6.0	0.1	43
101	Ethylene Oxide Absorber Tower	VOC Ethylene Oxide	1.1 <sup>14</sup> 1.1 <sup>14</sup>	1.3 <sup>14</sup> 1.3 <sup>14</sup>	27

	EMISSION SUMMARY					
SN	Description	Pollutant	Emission Rates		Cross	
			lb/hr	tpy	Ref. Page	
		PM	4.7	21.6		
Tota	l Allowable Emissions	$\mathbf{PM}_{10}$	4.7	21.6		
		$SO_2$	60.4	45.0		
		VOC	$340.0^{15}$	185.3 <sup>15</sup>		
			328.6 <sup>14</sup>	$183.5^{14}$		
		CO	4.6	23.0		
		$NO_x$	18.0	85.9		
		Methylene Chloride <sup>1</sup>	1.3	0.12		
		Freon 113	2.0	2.0		
		HCl <sup>6</sup>	0.1	0.44		
		Chlorine <sup>11</sup>	0.5	0.05		
		HMXDI <sup>2</sup>	0.08	0.1		
		Ethylene Oxide <sup>3</sup>	13.33 <sup>15</sup>	8.5 <sup>15</sup>		
			1.2514	1.63 <sup>14</sup>		
		DEHP ⁵	2.34	5.21		
		Chromium Compounds <sup>9</sup>	0.034	0.036		
		Manganese Compounds <sup>9</sup>	0.0034	0.0036		
		Ethylene Glycol <sup>3</sup>	1.32	0.066		
		Methyl Ethyl Ketone <sup>10</sup>	5.0	2.0		
		(Total HAPs)	24.01 <sup>15</sup>	16.53 <sup>15</sup>		
		``´´´	13.93 <sup>14</sup>	<b>9.66</b> <sup>14</sup>		

- <sup>1</sup> Methylene Chloride is a listed HAP. It is a listed non-VOC hydrocarbon.
- $^{2}$  HMXDI is a listed HAP. Emission rate of HMXDI is included in that of VOC.
- <sup>3</sup> Ethylene Oxide and Ethylene Glycol are listed HAPs. Emission rates of both hydrocarbons are included in that of VOC.
- <sup>4</sup> Ethylene Oxide may be emitted <u>only</u> as a result of emergency or upset conditions.
- <sup>5</sup> DEHP is a listed HAP. Emission rate of DEHP is included in that of VOC.
- <sup>6</sup> HCl is a listed HAP.
- <sup>7</sup> Only HAPs with relative toxicity 1.0 are permitted at this source.
- Ethylene Oxide shall be emitted <u>only</u> as a result of emergency or upset conditions (Specific Conditions 29, 59 and 46).
- <sup>9</sup> Chromium and Manganese Compounds are listed HAPs. Emission rates of the compounds

are included in that of  $PM/PM_{10}$ .

- Methyl Ethyl Ketone is a listed HAP. Emission rate of the hydrocarbon is included in that of VOC.
- <sup>11</sup> Chlorine is a listed HAP.
- <sup>12</sup> Content of specific HAPs is unknown.
- <sup>13</sup> Two aeration rooms will be in service until December 6, 1999. Effective December 6, 1999, aeration room #3 (SN-74, SN-75) will be cascaded into aeration room #4 (SN-76 and SN-77) which will be controlled by catalytic oxidizer.
- <sup>14</sup> Emission rates are effective starting December 6, 1999.
- <sup>15</sup> Emission rates are effective until December 6, 1999. Starting December 6, 1999, ethylene oxide emissions shall be controlled by catalytic oxidizer and/or acid-water scrubber.

#### SECTION III: PERMIT HISTORY

Travenol Laboratories, Inc. was issued first air permit #530-A in 1978. It was permitted to install two grinders (SN-41) and three boilers (SN-16, SN-17, and SN-18). The boilers were permitted to use fuel oil #2 as a secondary fuel. Natural gas was used as a primary fuel.

In 1978, Travenol Laboratories was permitted to construct three sterilization chambers (permit #544-A). Ethylene oxide was permitted to be used as a sterilization agent (SN-11, SN-12, and SN-13).

In 1979, the permit #544-A was modified. A degreasing unit (SN-19) was permitted to be installed.

In 1980, the permit #530-A was modified. Fuel oil #5 was permitted to be burned in the boilers as a backup fuel.

In 1982, the permit #544-A was modified again. Travenol Laboratories had proposed to begin manufacturing the CF Dialyzers (SN-07).

In 1986, first consolidated permit #544-AR-3 was issued for the facility. All previous permits were voided. Many existing sources previously not permitted were included in the permit. Total 45 sources were included in the consolidated permit. The second function of the permit was to allow Travenol Laboratories, Inc. to install and operate a ten-place ethylene oxide (EtO) sterilizer. By that time, four chambers were operated at the facility, and one more chamber was permitted (SN-11 through SN-15).

In 1988, the facility's name was changed to Baxter Healthcare Corporation (Baxter). Permit #544-AR-4 allowed the facility to install equipment to manufacture Marathon Filters (SN-46). The facility was required to test Freon 113 emissions from SN-46 and install, calibrate, and maintain a device to continuously monitor the hydrocarbons emissions from SN-46.

In 1988 (permit #544-AR-5), the Baxter was permitted to install a second Capillary Flow (CF) Dialyzer manufacturing line (SN-47 through SN-56). The permittee was required to measure the Freon TF emissions from the phase V Freon system (SN-53).

In 1990 (permit #544-AR-6), the Baxter was allowed to construct a scrubber (SN-58) as a part of the ethylene oxide sterilization system. The facility was required to route ethylene oxide from sterilization chambers to the scrubber. The following sources had been removed from service: Boiler #3 (SN-18), Degreasing unit (SN-19), Ultrasonic Degreaser (SN-20), and Incinerator (SN-28). Some other minor changes were included in the permit.

In 1994 (permit #544-AR-7), the Baxter was allowed to install a high intensity plastics blend system (SN-59 through SN-66). The following sources had been removed from service: SN-08, SN-10, SN-29, SN-42, SN-43, SN-45, SN-47, SN-48, SN-52, SN-53, SN-55, SN-56. The permit also included some other minor changes. All processes at the facility were permitted to be operated 24 hours per day, 7 days per week, and 52 weeks per year (8760 hours per year) unless otherwise specified.

In 1995, the Baxter was issued a minor permit modification (permit #544-AR-8). The facility was allowed to upgrade the pressure relief protection of the chillers in the boiler room complex to comply with ASHRAE Standard 15 (SN-67, SN-68, and SN-69). Other changes in the minor permit modification included the removal from service SN-49, SN-50, SN-51, and SN-54. The facility was identified as subject to requirements of Ethylene Oxide Emissions Standards for Sterilization Facilities (40 CFR Part 63, Subpart O). The facility was also identified as subject to requirements of the Title V air permitting (40 CFR Part 70).

In 1996, the Baxter was issued a minor permit modification (permit #544-AR-9) to add Pallet Treatment Process (SN-91).

The current permit # 544-AOP-R0 is the first Title V permit for the facility. The changes associated with the current modification may be found in Sections II and IV of this permit.

Changes and total emission limits associated with the permits mentioned above are provided in the following table.

Permit #	Facility Wide (TPY)			
(Year)	Pollutant	Net Change	Permitted	
530-A (1978)	PM/PM <sub>10</sub>		6.13	
544-A (1978)	Ethylene Oxide (VOC, HAP)		147.8	
544-A (Modification) (1979)	Freon 113		32.85	

Permit #	Facility Wide (TP)	<i>(</i> )	
(Year)	Pollutant	Net Change	Permitted
544-AR-3 (1986)	TSP SO <sub>2</sub> VOC Freon 113 Methylene Chloride (HAP) Hydrochloric Acid (HAP) Hexamethylene Diisocyanate (VOC, HAP) Ethylene Oxide (VOC, HAP)	27.29  -51.85 121.75   2 -92.6	33.42 1.8 95.95 154.6 2.37 0.81 0.15 55.2
544-AR-4 (1988)	TSP SO <sub>2</sub> VOC Freon 113 Methylene Chloride (HAP) Hydrochloric Acid (HAP) Hexamethylene Diisocyanate (VOC, HAP) Ethylene Oxide (VOC, HAP)	$\begin{array}{c} 0 \\ 0 \\ 0 \\ 10.526 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array}$	33.42 1.8 95.95 165.13 2.37 0.81 0.15 55.2
544-AR-5 (1988)	TSP SO <sub>2</sub> VOC Freon 113 Methylene Chloride (HAP) Hydrochloric Acid (HAP) Hexamethylene Diisocyanate (VOC, HAP) Ethylene Oxide (VOC, HAP)	$\begin{array}{c} 0\\ 0\\ 28.18\\ 65.70\\ 4.73\\ 0\\ 0.15\\ 0\end{array}$	33.42 1.8 124.13 230.83 7.10 0.81 0.30 55.2
544-AR-6 (1990)	PM/PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub> Freon 113 Methylene Chloride (HAP) Hydrochloric Acid (HAP) Hexamethylene Diisocyanate (VOC, HAP) Ethylene Oxide (VOC, HAP)	-4.09 175.98 -35.56  -100.82 -0.1 0 -0.008 -36.98	29.33 177.78 88.57 11.33 124.56 130.01 7.0 0.81 0.292 18.22

Permit #	Facility Wide (TP)	ľ)	
(Year)	Pollutant	Net Change	Permitted
544-AR-7 (1994)	PM/PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub> Freon 113 Methylene Chloride (HAP) Hydrochloric Acid (HAP) Hexamethylene Diisocyanate (VOC, HAP) Ethylene Oxide (VOC, HAP) Cyclohexanone Myristate Oil	$\begin{array}{c} 0.27\\ 0\\ -26.57\\ 0\\ 0\\ -63.41\\ 0.1\\ -0.81\\ 0.208\\ 0\\ 0.1\\ 0.1\\ 0.1\\ \end{array}$	$29.6 \\ 177.8 \\ 62 \\ 11.4 \\ 124.5 \\ 66.6 \\ 7.1 \\ 0 \\ 0.5 \\ 18.2 \\ 0.1 \\ 0.1 \\ 0.1$
544-AR-8 (1995)	PM/PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub> Freon 113 Freon 11 HCFC 123 Methylene Chloride (HAP) Hexamethylene Diisocyanate (VOC, HAP) Ethylene Oxide (VOC, HAP) Cyclohexanone Myristate Oil	$2.9 \\ 0.2 \\ -14.5 \\ 0 \\ 0.4 \\ 0 \\ 0.4 \\ -4.5 \\ -0.1 \\ -15.3 \\ 0.3 \\ 0.3 \\ 0.3$	$\begin{array}{c} 32.2 \\ 178.0 \\ 47.5 \\ 11.4 \\ 124.9 \\ 66.6 \\ 0.4 \\ 0.4 \\ 2.6 \\ 0.4 \\ 2.9 \\ 0.4 \\ 0.4 \\ 0.4 \end{array}$

Permit #	Facility Wide (TPY)			
(Year)	Pollutant	Net Change	Permitted	
544-AR-9 (1996)	PM/PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub> Freon 113 Freon 11 HCFC 123 Methylene Chloride (HAP) Hexamethylene Diisocyanate (VOC, HAP) Ethylene Oxide (VOC, HAP) Cyclohexanone Myristate Oil	$\begin{array}{c} 0.1 \\ 0.1 \\ 0.1 \\ 0.1 \\ 0.1 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ $	$\begin{array}{c} 32.3 \\ 178.1 \\ 47.6 \\ 11.5 \\ 125.0 \\ 66.6 \\ 0.4 \\ 0.4 \\ 2.6 \\ 0.4 \\ 2.9 \\ 0.4 \\ 0.4 \\ 0.4 \end{array}$	
544-AOP-R0 (1999)	PM/PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub> Freon 113 Freon 11 HCFC 123 Methylene Chloride (HAP) HCl (HAP) Chlorine (HAP) Hexamethylene Diisocyanate (VOC, HAP) Ethylene Oxide (VOC, HAP) DEHP (VOC, HAP) Chromium Compounds (PM/PM <sub>10</sub> , HAP) Manganese Compounds (PM/PM <sub>10</sub> , HAP) Ethylene Glycol (VOC, HAP) Methyl Ethyl Ketone (VOC, HAP)	$\begin{array}{c} -10.9\\ -133.2\\ 133.6\\ 11.0\\ -41.1\\ -64.6\\ -0.4\\ -0.4\\ -0.4\\ -2.48\\ 0.44\\ 0.05\\ 0.0\\ -0.91\\ 5.51\\ 0.036\\ 0.0036\\ 0.0036\\ 0.0066\\ 2.0\\ \end{array}$	$\begin{array}{c} 21.4 \\ 44.9 \\ 181.2 \\ 22.5 \\ 83.9 \\ 2.0 \\ 0.0 \\ 0.0 \\ 0.0 \\ 0.12 \\ 0.44 \\ 0.05 \\ 0.4 \\ 1.99 \\ 5.51 \\ 0.036 \\ 0.0036 \\ 0.0036 \\ 0.066 \\ 2.0 \end{array}$	

SECTION IV: EMISSION UNIT INFORMATION

Revised: September 8, 1999

> SN-02: Capco Assembly Area SN-03: Vacuum Dryers SN-04: Combined CF Dialyzer Process Vent

#### Source Description

The capillary flow (CF) Dialyzers, plastic disposable devices used in kidney dialysis machines, are assembled at this unit. The dialyzer consists of a bundle of hollow fibers which is sealed into a plastic casing. The fibers are purchased from an outside supplier. Fibers are placed into a plastic case which is capped in the Case/bundle assembly area (SN-02). Caps are attached by friction fit. The units are then vacuum-dried to remove moisture (SN-03). There are no regulated pollutants emitted from SN-02 and SN-03. The bundles are then sent to the Orbital centrifuge (SN-04) where the fibers are sealed in place with urethane. The urethane is made by mixing the prepolymer with blended catalyst (chain extender), then mixture is injected into the filters. Liquids come in sealed drums, and VOC emissions during drum handling are considered insignificant and identified in the Section VI: De Minimis Emission Sources. One of the prepolymers used to make urethane contains 5% 1,6-Hexamethylene diisocyanate (HMXDI), a listed HAP (CAS No. 822-06-0). A great majority of the HMXDI is incorporated into the product. Finally, the individual units are cut and sent to final assembly and packaging areas. Dry cutter emits inside the building.

#### Alternative Scenario #1

Methylene chloride (HAP, CAS NO. 74-87-3) is used to clean machine parts used in the potting equipment cleaning process. Methylene chloride comes in sealed drums. Used methylene chloride is collected in tightly closed containers. Emissions from potting equipment cleaning process are routed to SN-04.

#### Alternative Scenario #2

Dynasolve CU-6 (mixture of cyclic amide; butyrolacton; ethanol, 2-phenoxy-; tripropylene glycol monomethyl ether; propanoic acid, 3-ethoxy, ethyl ester; ethyoxylated nonylphenol) is used to clean machine parts used in the potting equipment cleaning process. Dynasolve CU-6 comes in sealed containers. Used Dynasolve CU-6 is collected in tightly closed containers. Emissions from potting equipment cleaning process are routed to SN-04.

The process and the equipment were installed in 1982.

<u>Current modification</u> includes the following changes:

- C Isopropanol (IPA) wash step is eliminated, and alcohol wash centrifuge is removed from service (former SN-09).
- C There are no more IPA emissions from SN-03.
- C SN-01 is eliminated.

C Solvent bond of caps using methylene chloride (MeCl) and cyclohexanone is eliminated. Capco Assembly name is changed to Popco Assembly (SN-02).

Source #	Pollutant	Net Change (TPY)	Emission Rate (TPY)
SN-01	Myristate Oil	-0.4	0.0
SN-02	Cyclohexanone	-0.4	0.0
SN-04	Methylene Chloride	-2.5	0.1

Emission rate changes associated with current modification are shown in the following table.

#### Specific Conditions

1. Pursuant to \$19.5 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 3 and 4.

Sourc	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
04	VOC	1.0	0.1

2. Pursuant to \$18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 3.

Source	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
04	Methylene Chloride 1,6-Hexamethylene diisocyanate (HMXDI)	1.0 0.08	0.1 0.1

3. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall not exceed a total methylene chloride throughput of 900 pounds for any consecutive

twelve (12) month period for potting equipment cleaning (SN-04), while the source is operating under Alternative Scenario #1.

- 4. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall not exceed a total Dynasolve CU-6 throughput of 900 pounds for any consecutive twelve (12) month period for potting equipment cleaning (SN-04), while the source is operating under Alternative Scenario #2.
- 5. Pursuant to \$18.10 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 maintain records which demonstrate compliance with the limit set in Specific Conditions 3 and 4, and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

#### SN-07: CF Dialyzer Repair Station

#### Source Description

<u>Current modification</u> includes the following changes.

- C Solvent wash process is eliminated, and Vacuum-to-Vacuum washer is removed from service.
- C In the future, the permittee proposes to replace Freon 113 with HFE-7100 (mixture of methyl nonafluorobutylether and methyl nonafluoroisobutylether). HFE-7100 is VOC but not an ozone depleting chemical.

Emission rate changes associated with the current modification are shown in the following table.

Source #	Pollutant	Net change (TPY)	Permitted rate (TPY)
SN-07	Freon 113 Isopropyl Alcohol	-54.1 -6.6	2.0 0.0
	VOC	2.0	2.0

#### Alternative Scenario #1

The CF Dialyzers repair station uses Freon 113 (1,1,1-trichloro-2,2,2-trifluoroethane, CFC-113) to detect leaking filter fibers. Freon 113 has been found to have negligible photochemical reactivity and is not considered VOC. Freon 113 is a Class I, Group I ozone depleting chemical. The process and the equipment were installed in 1982.

The emissions of Freon 113 from the repair station are controlled by a series of two carbon absorbers. The absorbers are operated at ambient temperature and regenerated with steam as needed. The digital readout alerts operator that the carbon absorber should be stripped. The readout shows any presence of Freon in the exhaust air and is checked once a month. The activated carbon is replaced as needed. The condensed Freon-steam mixture passes through a water separator and a Freon recovery still to recover Freon by distillation. Reclaimed Freon is routed back to the repair station. The bottoms from the still, consisting of waste Freon and water, are sent to a disposal or reclaiming company.

#### Alternative Scenario #2

The CF Dialyzers repair station uses HFE-7100 (mixture of methyl nonafluorobutylether and methyl nonafluoroisobutylether) to detect leaking filter fibers. HFE-7100 is VOC but not an

ozone depleting chemical. The emissions of HFE-7100 are exhausted directly to the atmosphere through SN-07.

#### Specific Conditions

6. Pursuant to \$19.5 of the Regulation 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 8 and 10.

Source #	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
SN-07	VOC	2.0	2.0

7. Pursuant to \$18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the ozone depleting chemical emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 8 and 10.

Source #	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
SN-07	Freon 113	2.0	2.0

- 8. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 82, Subpart F, the permittee shall not exceed Freon 113 consumption 4,000 pounds for any consecutive twelve (12) month period for the CF dialyzers repair station (SN-07), while the source is operating under Alternative Scenario #1.
- 9. Pursuant to §18.10 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 82, Subpart F, the permittee shall maintain records which demonstrate compliance with the limits set in Specific Condition 8, while the source is operating under Alternative Scenario #1, and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

- 10. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed HFE-7100 consumption 4,000 pounds for any consecutive twelve (12) month period for the CF dialyzers repair station (SN-07), while the source is operating under Alternative Scenario #2.
- 11. Pursuant to \$19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limits set in Specific Condition 10, while the source is operating under Alternative Scenario #2, and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 12. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall replace activated carbon in both carbon absorbers (C-1 and C-2) as needed, while the source is operating under Alternative Scenario #1.
- 13. Pursuant to §18.10 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 maintain records which demonstrate compliance with Specific Condition 12, while the source is operating under Alternative Scenario #1, and may be used by the Department for enforcement purposes. The records shall be updated annually, shall be kept on site, and shall be provided to Department personnel upon request.

#### SN-09: Filter Integrity Test

#### Source Description

According to current modification, the new process, filter integrity test, is designated as SN-09. Alcohol wash centrifuge, previously permitted as SN-09, was removed from service.

<u>Integrity testing.</u> Filters are filled with or submerged into 99% isopropyl alcohol (IPA). After the alcohol is drained off, air is introduced to the filter to determine the bubble point. The filters are then dried by continuous air flow until all IPA is dispersed. The used IPA is collected and recycled. The testing is conducted several times per year, as necessary.

<u>Cleaning of small parts and fittings.</u> The parts are placed in a container and submerged into 99% isopropyl alcohol (IPA). Then they are removed and dried. The used alcohol is collected and recycled.

Isopropyl alcohol is received and collected in sealed containers. VOC emissions are vented to the atmosphere through normal powered room exhaust.

#### Specific Conditions

14. Pursuant to §19.5 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 15.

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
09	VOC	6.9 <sup>1</sup>	0.1

<sup>&</sup>lt;sup>1</sup> Reflects maximum possible emission rate.

15. Pursuant to §19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records of the isopropyl alcohol (IPA) usage, IPA waste collected, and IPA emissions (IPA usage minus IPA waste collected) which demonstrate compliance with the limit listed in Specific Condition 14 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

SN-11 through 15, 57 Sterilization Chamber Air Evacuation Vent

> SN-58 Sterilization Chambers Vent

SN-74 through 77 Aeration Rooms #3 and 4

SN-78 through 83 Sterilization Chamber Rear Exhaust Vents

> SN-88 Ethylene Glycol Tanks

> SN-94 EtO Catalytic Oxidizer

#### SN-101 EtO Sterilization Scrubber

Source Description

The currently used equipment was installed in 1990-1996. The aeration rooms #1, #2, and #3 have been used since 1985, 1987, and 1993, respectively.

There are six (6) ethylene oxide (EtO) gas sterilization chambers at the facility; there are two 1330 ft<sup>3</sup> (200 lb) and four 667 ft<sup>3</sup> (150 lb) chambers. After chambers are loaded with packaged items, the air from the chambers is pulled out by steam jet ejector (SN-11 through SN-15, and SN-57). Then, the chambers are filled with ethylene oxide. Negative gauge pressure is kept within the chambers during sterilization process. At the end of sterilization cycle, a maximum of 95% of ethylene oxide is pulled out by vacuum pumps and routed to the scrubber. In the scrubber, >99% of EtO is absorbed from the exhaust gas by water. Currently the sterilization chambers vent as SN-58. The absorbed EtO is converted to ethylene glycol by acid-catalyzed reaction with water in the plug flow reactor. The scrubber liquor is recirculated until the ethylene glycol concentration reaches the maximum concentration as established by the performance test. A storage tank provides the reservoir for the system liquor. As the system absorbs EtO and converts it to ethylene glycol, the liquor level in the storage tank rises slowly. When the liquor level reaches the high-level set-point, the system liquid needs to be changed. Ethylene glycol solution is pumped to and then stored in a 8,000 gal storage tank (SN-88). Ethylene glycol

production is limited by the throughput of ethylene oxide. Maximum of 550 lb/hr of ethylene oxide is evacuated to the scrubber based on history of cycle times and process flow.

After ethylene oxide is evacuated from the chamber, the chamber's front door is opened to remove sterilized product. Simultaneously, the rear chamber exhaust vent starts pulling air and remaining ethylene oxide from the chamber. Currently, rear chamber exhausts vent to the atmosphere as SN-78 through SN-83.

Product sterilized in any of the six sterilizers is moved to an aeration room to facilitate off gassing of the EtO. There are two (2) aeration rooms currently designated as aeration rooms 3 and 4 at the facility. Aeration rooms 1 and 2 have been combined and redesignated as aeration room #4 which is currently controlled by the catalytic oxidizer (SN-94). The aeration room #3 has two ventings to the atmosphere (SN-74, SN-75). Product can be moved to any of the two aeration rooms, and may be moved from one aeration room to another. Therefore, EtO emissions from the two aeration rooms are bubbled as though they were a single source. Prior to December 6, 1999 aeration room #3 will be exhausted into aeration room #4 controlled by the catalytic oxidizer (SN-94).

Currently emissions from the rear chamber exhaust vents (SN-78 through SN-83) are not controlled.

It is anticipated that in case of vacuum pump(s) failure to draw ethylene oxide from sterilization chambers to the absorber tower, the EtO from the chambers will be vented to the atmosphere through steam ejectors SN-11 through SN-15, SN-57. This situation is considered to be an upset condition. The modeling of short time period (1 hour) gas discharge from equipment opening (PUFF) for 200 lb sterilization chamber has shown that ethylene oxide concentration in the air outside the facility boundary at the ground level may exceed OSHA<sup>1</sup> 15 minute excursion limit.

The ethylene oxide is received in sealed drums. The handling of EtO drums is specified by Baxter's Document #14-03-05-002. According to the document, all the pipes must be filled with nitrogen prior to connection/disconnection operations (Section 4.4.A. of the Document). As a result, there is no ETO emissions to the atmosphere associated with drum handling. The handling of ETO drums according to alternative procedure (Section 4.4.B.) is considered an upset condition by the Department and should be reported in accordance with General Provision 8 (Section VII of the permit).

The facility is subject to the EtO NESHAP (40 CFR Part 63, Subpart O). Pursuant to interim final rule dated December 4, 1997 and signed by Carol M. Browner, Administrator, EPA

<sup>&</sup>lt;sup>1</sup> OSHA - Occupational Safety and Health Administration

[Federal Register: December 9, 1997 (Volume 62, Number 236, Page 64736-64738)], the compliance due date was extended until December 6, 1999. The facility uses more than 10 tons of EtO in sterilization. Effective December 6, 1999 the facility will operate under Alternative Operating Scenario #1 or #2.

The NESHAP General Provisions, 40 CFR §63.6(e)(3), requires sources to prepare a startup, shutdown, and malfunction plan (the Plan). The purpose of the Plan is to "(C) reduce the reporting burden associated with periods of startup, shutdown, and malfunction". However, the Subpart O does not contain any operation and maintenance plan requirements. The facility voluntarily has proposed to include the Plan in the permit to reduce the reporting burden associated with periods of startup, shutdown, and malfunction. In particular, the facility experiences power blinks, sometime as often as monthly. A power blink would trigger the catalytic oxidizer safety systems and shut the unit down. According to the facility, the startup cycle can take up to one (1) hour.

#### Alternative Operating Scenario #1

Effective December 6, 1999 sterilization chamber rear exhaust vents (SN-78 through SN-83) and aeration rooms #3 and 4 vents (SN-74 through SN-77) will be controlled by the catalytic oxidizer and vent as SN-94. The sterilization chamber vents (SN-11 through 15, and SN-57) will continue to be controlled by the existing scrubber (SN-58).

During the period of shutdown or malfunction of the catalytic oxidizer the emissions of the ethylene oxide form the aeration vents (SN-74 through SN-77) and sterilization chamber rear exhaust vents (SN-78 through SN-83) are routed directly to the atmosphere with the maximum ethylene oxide emission rate of 26.2 lbs/hr.

#### Alternative Operating Scenario #2

Effective December 6, 1999 sterilization chamber rear exhaust vents (SN-78 through SN-83) and sterilization chamber vents (SN-11 thorough 15, and SN-57) will be controlled by the new scrubber (SN-101). Existing scrubber (SN-58) will be taken out of service. The absorbed EtO is converted to ethylene glycol by acid-catalyzed reaction with water in the plug flow reactor. In order to keep from exceeding the maximum glycol concentration in the scrubber, small amounts of liquor are discharged periodically from the system into a 8,000 gallon holding tank (SN-88). Water is automatically replaced as required. Acid is automatically or manually replaced as well. Ethylene glycol production is limited by the throughput of ethylene oxide. Maximum of 550 lb/hr of ethylene oxide is evacuated to the scrubber based on history of cycle times and process flow.

Effective December 6, 1999 aeration rooms #3 and 4 vents (SN-74 through SN-77) will be controlled by the catalytic oxidizer and vent as SN-94.

During the period of shutdown or malfunction of the catalytic oxidizer, the emissions of ethylene oxide from the aeration room vents (SN-76 and SN-77) are routed directly to the atmosphere with the maximum ethylene oxide emission rate of 15.2 lb/hr.

#### Specific Conditions

#### Prior to December 6, 1999 Emission Rates and Specific Conditions (16-21)

16. Pursuant to \$19.5 of the Regulation 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 18.

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
11-15, 57 <sup>1</sup>	VOC	0.0	0.0
58	VOC	1.1	1.0
74-77	VOC	1.2	5.0
78-83	VOC	11.0	2.0
88	VOC	1.0	0.1
94	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub>	0.1 0.1 0.1 0.5 0.1 0.5	0.2 0.2 0.1 0.5 0.5 2

<sup>1</sup> VOC (Ethylene Oxide) may be emitted only as a result of emergency or upset conditions.

17. Pursuant to §18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 18.

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
11-15, 57	Ethylene Oxide	$0.0^{-1}$	$0.0^{-1}$
58	Ethylene Oxide Ethylene Glycol	1.1 0.32	1.0 0.016
74-77	Ethylene Oxide	1.14	5.0
78-83	Ethylene Oxide	11.0	2.0
88	Ethylene Glycol	1.0	0.05
94	Ethylene Oxide	0.03	0.5

<sup>1</sup> Ethylene oxide may be emitted only as a result of emergency or upset conditions.

- Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed usage of 200,000 pounds of ethylene oxide at the sterilization chambers for any consecutive twelve (12) month period.
- 19. Pursuant to \$19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 18 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 20. Pursuant to 19.705 of Regulation 19 and 40 CFR, Part 52, Subpart E, prior to December 6, 1999, the permittee shall not vent more than 3 vessels through the rear chamber at the same time.
- 21. Pursuant to \$19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 20 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

### Starting December 6, 1999 Alternate Operating Scenario #1 Emission Rates and Specific Conditions (22-51)

22. Pursuant to §19.5 of the Regulation 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 24.

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
11-15, 57 <sup>-1</sup>	VOC	0.0	0.0
58	VOC	1.1	1.0
74-83 <sup>1</sup>	VOC	0.0	0.0
88	VOC	1.0	0.1
94	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub>	0.1 0.1 0.1 0.5 0.1 0.5	0.2 0.2 0.1 0.5 0.5 2

- <sup>1</sup> VOC (Ethylene Oxide) may be emitted only as a result of emergency or upset conditions.
- 23. Pursuant to §18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 24.

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
11-15, 57 <sup>-1</sup>	Ethylene Oxide	0.0	0.0
58	Ethylene Oxide Ethylene Glycol	1.1 0.32	1.0 0.016

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
74-83 <sup>1</sup>	Ethylene Oxide	0.0	0.0
88	Ethylene Glycol	1.0	0.05
94	Ethylene Oxide	0.03	0.5

- <sup>1</sup> Ethylene oxide may be emitted only as a result of emergency or upset conditions.
- 24. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed usage of 331,000 pounds of ethylene oxide at the sterilization chambers for any consecutive twelve (12) month period.
- 25. Pursuant to §19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 24 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 26. Effective December 6, 1999, Pursuant to 40 CFR 63.360(a), the facility is subject to the provisions of 40 CFR, Part 63, Subpart O, Ethylene Oxide Emissions Standards for Sterilization Facilities as a source using more than 10 tons of ethylene oxide (EtO) during any consecutive 12-month period. A copy of Subpart O is provided in appendix A. Applicable provisions of Subpart O are included, but are not limited to, in Specific Conditions listed below.
- 27. Effective December 6, 1999, Pursuant to 40 CFR 63.360(a), the permittee shall comply with the requirements of 40 CFR 63, Subpart A, General Provisions according to the applicability of general provisions to the facility in Table 1 (current permit, Appendix B).
- 28. Effective December 6, 1999, Pursuant to 40 CFR 63.1(c), the permittee shall comply with the provisions of Subpart O according to the applicability of the emissions standards to the facility in Table 2 (current permit, Appendix C).
- 29. Pursuant to 40 CFR 63.362(a) and 40 CFR 63.362(d), prior to December 6, 1999, the permittee shall install a catalytic oxidizer to reduce emissions to the atmosphere from

aeration room #3 and #4 vent (SN-74 through SN-77) to a maximum concentration of 1 ppmv (Scenario #1) or by at least 99 percent (Scenario #2), whichever is less stringent.

- 30. Pursuant to 40 CFR 63.363(a), within 180 days after December 6, 1999, the permittee shall conduct an initial performance test of the catalytic oxidizer (SN-94) using the procedures listed in §63.7 of Subpart A of 40 CFR 63 according to the applicability in Table 1 (current permit, Appendix B).
- 31. Pursuant to 40 CFR 63.363(c)(1)(i), under Scenario #1, during the performance test required in Specific Condition 30, the permittee shall determine the concentration of ethylene oxide emitted from the aeration rooms and sterilization rear chamber exhausts into the atmosphere after the catalytic oxidizer (SN-94) using the methods in §63.365(c)(1) of 40 CFR 63, Subpart O.
- 32. Pursuant to 40 CFR 63.363(c)(1)(ii), under Scenario #2, during the performance test required in Specific Condition 30, the permittee shall determine the efficiency of the catalytic oxidizer using the test methods and procedures in §63.365(d)(1) of 40 CFR 63, Subpart O.
- 33. Pursuant to 40 CFR 63.363(c)(2), under Scenario #2, during the performance test required in Specific Condition 30, the permittee shall also establish as a site-specific operating parameter the baseline temperature using the procedures described in §63.365(f)(2) of 40 CFR 63, Subpart O.
- 34. Pursuant to General Condition 17, following the date on which the performance test of the catalytic oxidizer is completed, the permittee shall notify the Department under which scenario the source is operating.
- 35. Pursuant to 40 CFR 63.364(c)(4), the permittee shall install, calibrate, operate, and maintain a temperature monitor accurate to within  $\pm 5.6$  <sup>o</sup>C ( $\pm 10$  EF) to measure the oxidation temperature.
- 36. Pursuant to 40 CFR 63.363(c)(3)(ii), following the date on which the performance test of the catalytic oxidizer is completed, the permittee shall not operate the facility with the oxidation temperature, averaged over three hours, more than 5.6 °C (10 EF) below the baseline oxidation temperature.
- 37. Pursuant to 40 CFR 63.364(c)(2) and 40 CFR 63.364(f), the permittee shall continuously monitor and record the oxidation temperature at the outlet to the catalyst bed or at the exhaust point from the thermal combustion chamber using the temperature monitor

described in 40 CFR 63.364(c)(4). A data acquisition system for the temperature monitor shall compute and record an average oxidation temperature each hour and a 3-hour block average every third hour.

- 38. Pursuant to 40 CFR 63.365(f)(2), the facility shall establish the baseline temperature for the aeration room vent as the temperature for the catalytic oxidation unit or the oxidation temperature at the exhaust point from the thermal oxidation unit averaged over three test runs using the procedures in 40 CFR 63.365(d)(1).
- 39. Pursuant to 40 CFR 63.365(h), an owner or operator seeking to demonstrate compliance with the standards found at §§63.362 (d) or (e) with a monitoring device or procedure other than a gas chromatograph shall provide to the Department information describing the operation of the monitoring device or procedure and the parameters that would indicate proper operation and maintenance of the device or procedure. The Department may request further information and will specify appropriate test methods and procedures.
- 40. Pursuant to 40 CFR 63.363(a), (b), on or before December 6, 1999, the permittee shall conduct a performance test of the acid-water scrubber (SN-58) using the procedures listed in §63.7 of Subpart A of 40 CFR 63 according to the applicability in Table 1 (current permit, Appendix B), the procedures listed in sections 63.363(b), and the test methods listed in §63.365(b)(1) of Subpart O. The facility shall also establish the maximum liquor tank level using the procedures described in 63.365 (e)(2).
- 41. Pursuant to 40 CFR 63.363(b)(2)(i), following the date on which the performance test of the scrubber is completed, operation of the facility with the liquor tank level in excess of the maximum liquor tank level shall constitute a violation of the sterilization chamber vent standard.
- 42. Pursuant to 40 CFR 63.364(b)(1), following the date on which the performance test of the acid-water scrubber is completed, the permittee shall measure and record once per week the level of the scrubber liquor in the recirculation tank. The owner or operator shall install, maintain, and use a liquid level indicator to measure the scrubber liquor level. Monitoring is required during a week only if the scrubber has been operated.
- 43. Pursuant to General Condition 17, the permittee shall notify the Department under which scenario the facility is operating.
- 44. Pursuant to 40 CFR 63.364(f), the permittee shall monitor the control device to which emissions from the rear chamber exhaust are manifolded using requirements in 63.364(c).

- 45. Pursuant to 40 CFR 63.367(a), the permittee shall comply with the recordkeeping requirements in §63.10(b) and (c) of Subpart A, according to the applicability in Table 1 (current permit, Appendix B).
- 46. Pursuant to 40 CFR 63.6(e)(3)(i), the permittee shall develop and implement a written startup, shutdown, and malfunction plan (the Plan) that describes, in detail, procedures for operating and maintaining the catalytic oxidizer (SN-94) and sources controlled by the oxidizer during periods of startup, shutdown, and malfunction and a program of corrective action.
- 47. Pursuant to 40 CFR 63.6(e)(3)(v), the written Plan shall be kept at the facility for the life of SN-94 and shall be made available for inspection by Department personnel upon request. If the Plan is revised, the permittee shall keep all previous versions for 5 years after each revision and make them available for inspection.
- 48. Pursuant to 40 CFR 63.6(e)(3)(ii), during periods of startup, shutdown, and malfunction, the permittee shall operate the catalytic oxidizer (SN-94) in accordance with the procedures specified in the Plan developed under Specific Condition 46.
- 49. Pursuant to 40 CFR 63.6(e)(3)(iii), the permittee shall keep records for all actions taken during a startup, shutdown, or malfunction (including actions taken to correct a malfunction). The permittee shall keep records of these events as specified in 40 CFR 63.10(b). If period of shutdown did not exceed one (1) hour, the permittee does not have to report to the Department.
- 50. Pursuant to 40 CFR 63.6(e)(3)(iv) and §19.6(a) of Regulation 19, if an action taken by the permittee during a startup, shutdown, and malfunction (including an action taken to correct malfunction) is not consistent with the procedures specified in the Plan, particularly, if shutdown period exceeded one (1) hour, the permittee shall report such actions to the Department in accordance with General Provision 8 (Section VII of the permit).
- 51. Pursuant to 40 CFR 63.10(b)(5)(i), the permittee shall submit semiannually startup, shutdown, and malfunction reports to the Department. The report shall be due within 30 days of the end of the reporting period. The report shall consist of a letter, containing the name, title, and signature of the responsible official as defined in §26.2 of Regulation 26 and shall state all actions taken during a startup, shutdown, and malfunction of SN-94 (including actions taken to correct a malfunction).

### Starting December 6, 1999 Alternate Operating Scenario #2 Emission Rates and Specific Conditions (52-82)

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52. Pursuant to §19.5 of the Regulation 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 54.

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
11-15, 57 <sup>-1</sup>	VOC	0.0	0.0
76-83 <sup>1</sup>	VOC	0.0	0.0
88	VOC	1.0	0.1
94	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub>	0.1 0.1 0.2 0.1 0.5	0.2 0.2 0.1 0.5 0.5 2
101	VOC	1.1	1.3

<sup>1</sup> VOC (Ethylene Oxide) may be emitted only as a result of emergency or upset conditions.

53. Pursuant to §18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 54.

Source	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
11-15, 57	Ethylene Oxide	0.0 1	0.0 1
58	Ethylene Oxide	1.1	1.0
	Ethylene Glycol	0.32	0.016
76-77	Ethylene Oxide	0.0	0.0

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
78-83	Ethylene Oxide	11.0	2.0
88	Ethylene Glycol	1.0	0.05
94	Ethylene Oxide	0.03	0.5

- <sup>1</sup> Ethylene oxide may be emitted only as a result of emergency or upset conditions.
- 54. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed usage of 331,000 pounds of ethylene oxide at the sterilization chambers for any consecutive twelve (12) month period.
- 55. Pursuant to §19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 54 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 56. Effective December 6, 1999, Pursuant to 40 CFR 63.360(a), the facility is subject to the provisions of 40 CFR, Part 63, Subpart O, Ethylene Oxide Emissions Standards for Sterilization Facilities as a source using more than 10 tons of ethylene oxide (EtO) during any consecutive 12-month period. A copy of Subpart O is provided in appendix A. Applicable provisions of Subpart O are included, but are not limited to, in Specific Conditions listed below.
- 57. Effective December 6, 1999, Pursuant to 40 CFR 63.360(a), the permittee shall comply with the requirements of 40 CFR 63, Subpart A, General Provisions according to the applicability of general provisions to the facility in Table 1 (current permit, Appendix B).
- 58. Effective December 6, 1999, Pursuant to 40 CFR 63.1(c), the permittee shall comply with the provisions of Subpart O according to the applicability of the emissions standards to the facility in Table 2 (current permit, Appendix C).
- 59. Pursuant to 40 CFR 63.362(a) and 40 CFR 63.362(d), prior to December 6, 1999, the permittee shall install a catalytic oxidizer to reduce emissions to the atmosphere from each

aeration room vent (SN-74 through SN-77) to a maximum concentration of 1 ppmv (Scenario #1) or by at least 99 percent (Scenario #2), whichever is less stringent.

- 60. Pursuant to 40 CFR 63.363(a), within 180 days after December 6, 1999, the permittee shall conduct an initial performance test of the catalytic oxidizer (SN-94) using the procedures listed in §63.7 of Subpart A of 40 CFR 63 according to the applicability in Table 1 (current permit, Appendix B).
- 61. Pursuant to 40 CFR 63.363(c)(1)(i), under Scenario #1, during the performance test required in Specific Condition 60, the permittee shall determine the concentration of ethylene oxide emitted from the aeration room into the atmosphere after the catalytic oxidizer (SN-94) using the methods in §63.365(c)(1) of 40 CFR 63, Subpart O.
- 62. Pursuant to 40 CFR 63.363(c)(1)(ii), under Scenario #2, during the performance test required in Specific Condition 60, the permittee shall determine the efficiency of the catalytic oxidizer using the test methods and procedures in §63.365(d)(1) of 40 CFR 63, Subpart O.
- 63. Pursuant to 40 CFR 63.363(c)(2), under Scenario #2, during the performance test required in Specific Condition 60, the permittee shall also establish as a site-specific operating parameter the baseline temperature using the procedures described in §63.365(f)(2) of 40 CFR 63, Subpart O.
- 64. Pursuant to General Condition 17, following the date on which the performance test of the catalytic oxidizer is completed, the permittee shall notify the Department under which scenario the source is operating.
- 65. Pursuant to 40 CFR 63.364(c)(4), the permittee shall install, calibrate, operate, and maintain a temperature monitor accurate to within  $\pm 5.6$  °C ( $\pm 10$  EF) to measure the oxidation temperature.
- 66. Pursuant to 40 CFR 63.363(c)(3)(ii), following the date on which the performance test of the catalytic oxidizer is completed, the permittee shall not operate the facility with the oxidation temperature, averaged over three hours, more than 5.6 °C (10 EF) below the baseline oxidation temperature.
- 67. Pursuant to 40 CFR 63.364(c)(2) and 40 CFR 63.364(f), the permittee shall continuously monitor and record the oxidation temperature at the outlet to the catalyst bed or at the exhaust point from the thermal combustion chamber using the temperature monitor described in 40 CFR 63.364(c)(4). A data acquisition system for the temperature monitor

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shall compute and record an average oxidation temperature each hour and a 3-hour block average every third hour.

- 68. Pursuant to 40 CFR 63.365(f)(2), the facility shall establish the baseline temperature for the aeration room vent as the temperature for the catalytic oxidation unit or the oxidation temperature at the exhaust point from the thermal oxidation unit averaged over three test runs using the procedures in 40 CFR 63.365(d)(1).
- 69. Pursuant to 40 CFR 63.365(h), an owner or operator seeking to demonstrate compliance with the standards found at §§63.362 (d) or (e) with a monitoring device or procedure other than a gas chromatograph shall provide to the Department information describing the operation of the monitoring device or procedure and the parameters that would indicate proper operation and maintenance of the device or procedure. The Department may request further information and will specify appropriate test methods and procedures.
- 70. Pursuant to 40 CFR 63.362(a), 40 CFR 63.362(c), and 40 CFR 63.362(e)(1), prior to December 6, 1999, the permittee shall install an acid-water scrubber to reduce emissions to the atmosphere from the sterilization chamber vent (SN-11 through 15 and 57) and the sterilization chamber rear exhaust vents (SN78 through 83).
- 71. Pursuant to 40 CFR 63.363(a), (b), on or after December 6, 1999, the permittee shall conduct a performance test of the acid-water scrubber (SN-101) using the procedures listed in §63.7 of Subpart A of 40 CFR 63 according to the applicability in Table 1 (current permit, Appendix B), the procedures listed in sections 63.363(b), and the test methods listed in §63.365(b)(1) of Subpart O. The facility shall also establish the maximum ethylene glycol concentration or maximum scrubber tank level as an operating parameter using the procedures described in 63.365 (e).
- 72. Pursuant to 40 CFR 63.363(b)(2)(i), following the date on which the performance test of the scrubber is completed, operation of the facility with an ethylene glycol concentration in the scrubber liquor in excess of the maximum ethylene glycol concentration or the liquor tank level in excess of the maximum liquor tank level shall constitute a violation of the sterilization chamber vent standard.
- 73. Pursuant to 40 CFR 63.364(b), following the date on which the performance test of the acidwater scrubber is completed, the permittee shall sample the scrubber liquor, analyze, and record once per week the ethylene glycol concentration of the scrubber liquor or measure and record once per week the level of the scrubber liquor in the recirculation tank using the test methods and procedures in 63.365(e). Monitoring is required during a week only if the scrubber has been operated; or measure and record once per week the level of the scrubber

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liquor in the reciculation tank. The owner or operator shall install, maintain, and use a liquor level indicator to measure the scrubber liquor tank level .

- 74. Pursuant to General Condition 17, the permittee shall notify the Department under which testing scenario the facility is operating.
- 75. Pursuant to 40 CFR 63.364(f), the permittee shall monitor the control device to which emissions from the rear chamber exhaust are manifolded using requirements in 63.364(b).
- 76. Pursuant to 40 CFR 63.367(a), the permittee shall comply with the recordkeeping requirements in §63.10(b) and (c) of Subpart A, according to the applicability in Table 1 (current permit, Appendix B).
- 77. Pursuant to 40 CFR 63.6(e)(3)(i), the permittee shall develop and implement a written startup, shutdown, and malfunction plan (the Plan) that describes, in detail, procedures for operating and maintaining the catalytic oxidizer (SN-94) and sources controlled by the oxidizer during periods of startup, shutdown, and malfunction and a program of corrective action.
- 78. Pursuant to 40 CFR 63.6(e)(3)(v), the written Plan shall be kept at the facility for the life of SN-94 and shall be made available for inspection by Department personnel upon request. If the Plan is revised, the permittee shall keep all previous versions for 5 years after each revision and make them available for inspection.
- 79. Pursuant to 40 CFR 63.6(e)(3)(ii), during periods of startup, shutdown, and malfunction, the permittee shall operate the catalytic oxidizer (SN-94) in accordance with the procedures specified in the Plan developed under Specific Condition 77.
- 80. Pursuant to 40 CFR 63.6(e)(3)(iii), the permittee shall keep records for all actions taken during a startup, shutdown, or malfunction (including actions taken to correct a malfunction). The permittee shall keep records of these events as specified in 40 CFR 63.10(b). If period of shutdown did not exceed one (1) hour, the permittee does not have to report to the Department.
- 81. Pursuant to 40 CFR 63.6(e)(3)(iv) and §19.6(a) of Regulation 19, if an action taken by the permittee during a startup, shutdown, and malfunction (including an action taken to correct malfunction) is not consistent with the procedures specified in the Plan, particularly, if shutdown period exceeded one (1) hour, the permittee shall report such actions to the Department in accordance with General Provision 8 (Section VII of the permit).

82. Pursuant to 40 CFR 63.10(b)(5)(i), the permittee shall submit semiannually startup, shutdown, and malfunction reports to the Department. The report shall be due within 30 days of the end of the reporting period. The report shall consist of a letter, containing the name, title, and signature of the responsible official as defined in §26.2 of Regulation 26 and shall state all actions taken during a startup, shutdown, and malfunction of SN-94 (including actions taken to correct a malfunction).

#### SN-16: Lasker Boiler

#### SN-17: Babcock & Wilcox Boiler

SN-18: Boiler #3

#### SN-100: Fuel #2 Storage Tank

#### Source Description

Currently, there are two boilers at the facility: Lasker boiler (SN-16) and Babcock & Wilcox boiler (SN-17).

<u>Current modification</u> includes the following changes.

- C Installation of the third boiler (SN-18) with the maximum design heat input capacity of 42.8 million Btu per hour (Btu/hr).
- C The facility is no longer permitted to burn No.5 fuel oil in the boilers.

Emission rate changes associated with the current modification are shown in the following table.

Source	Pollutant	Net change (TPY)	Permitted rate (TPY)
SN-16	PM/PM <sub>10</sub>	-7.9	2.6
	SO <sub>2</sub>	-67.8	13.2
	CO	1.4	6.7
	NO <sub>x</sub>	-32.2	24.8
SN-17	PM/PM <sub>10</sub>	-9.3	3.1
	SO <sub>2</sub>	-81.4	15.6
	CO	1.4	7.6
	NO <sub>x</sub>	-38.4	29.5

The Lasker boiler with the maximum design heat input capacity of 35 million Btu per hour (Btu/hr) (SN-16) was installed in 1964. The Babcock & Wilcox boiler with the maximum design heat input capacity of 42.8 million Btu per hour (Btu/hr) (SN-17) was installed in 1975. In June, 1978, permit #530-A, the facility (formerly Travenol Laboratories, Inc.) was permitted to install three (3) boilers. The third boiler was never installed and was removed from permit in September, 1990, permit #544-AR-6. In 1980, the facility was permitted to use No.5 fuel oil in their boilers as a backup fuel.

The facility was never required to perform stack testing of the emissions from the boilers.

The proposed third boiler (SN-18) with the maximum design heat input capacity of 42.8 million Btu per hour (Btu/hr) is subject to 40 CFR, Part 60 (NSPS), Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

The fuel oil #2 used as a back up fuel is stored in three (3) 15,000 gallon storage tanks (SN-100). The fuel oil throughput at the storage tanks is limited by the limit of the fuel usage in the boilers. Two tanks were installed in 1964 and one tank was installed in 1975. The storage tanks are not subject to the provisions of 40 CFR, Part 60, Subpart K because each individual tank's capacity is less than 40,000 gallons.

## Specific Conditions

83. Pursuant to §19.5 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 84, 86, and 87.

Source	Pollutant	Emission Rate	Emission Rate	
No.		(lb/hr)	(tpy)	
16	Natural Gas Com	Natural Gas Combustion		
	PM/PM <sub>10</sub>	0.5	2.2	
	SO <sub>2</sub>	0.1	0.5	
	VOC	0.1	0.4	
	CO	1.3	5.7	
	NO <sub>x</sub>	4.9	21.2	
		Fuel #2 Combustion		
	PM/PM <sub>10</sub>	0.5	0.4	
	SO <sub>2</sub>	17.6	12.7	
	VOC	0.1	0.1	
	CO	1.3	1.0	
	NO <sub>x</sub> Total Emissio	5.0 on	3.6	
	PM/PM <sub>10</sub>	0.5	2.6	
	SO <sub>2</sub>	17.6	13.2	
	VOC	0.1	0.5	
	CO	1.3	6.7	
	NO <sub>x</sub>	5.0	24.8	

Source	Pollutant	Emission Rate	Emission Rate	
No.		(lb/hr)	(tpy)	
17	Natural Gas Com	Natural Gas Combustion		
	PM/PM <sub>10</sub>	0.6	2.6	
	SO <sub>2</sub>	0.1	0.4	
	VOC	0.1	0.4	
	CO	1.5	6.5	
	NOx 5.8   Fuel #2 Combustion		25.1	
	PM/PM <sub>10</sub>	0.6	0.5	
	SO <sub>2</sub>	21.1	15.2	
	VOC	0.1	0.1	
	CO	1.5	1.1	
	NO <sub>x</sub>	6.0	4.4	
	Total Emission	on		
	PM/PM <sub>10</sub>	0.6	3.1	
	SO <sub>2</sub>	21.1	15.6	
	VOC	0.1	0.5	
	CO	1.5	7.6	
	NO <sub>x</sub>	6.0	29.5	

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)	
18	Natural Gas Com	Natural Gas Combustion		
	PM/PM <sub>10</sub>	0.6	2.6	
	$SO_2$	0.1	0.4	
	VOC	0.1	0.4	
	СО	1.5	6.5	
	NO <sub>x</sub>	5.8	25.1	
	Fuel #2 Combu	istion		
	<b>PM/PM</b> <sub>10</sub>	0.6	0.5	
	SO <sub>2</sub>	21.1	15.2	
	VÕČ	0.1	0.1	
	CO	1.5	1.1	
	NO <sub>x</sub>	6.0	4.4	
	Total Emissi	ion		
	PM/PM <sub>10</sub>	0.6	3.1	
	SO <sub>2</sub>	21.1	15.6	
	VOC	0.1	0.5	
	CO	1.5	7.6	
	NO <sub>x</sub>	6.0	29.5	
100 <sup>1</sup>	VOC	6.0	0.1	

- 84. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall use only No.2 fuel oil that contains 0.5% or less sulfur by weight as a back-up fuel in the boilers (SN-16 and SN-17).<sup>2</sup>
- 85. Pursuant to §19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain certifications from the fuel supplier which demonstrate compliance with the limits set in Specific Condition 84 and may be used by the Department for enforcement purposes.

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<sup>&</sup>lt;sup>1</sup> VOC emissions are limited by the usage of fuel #2 in the boilers (Specific Condition 87).

<sup>&</sup>lt;sup>2</sup> The type of back-up fuel for boiler #3 (SN-18) is limited by Specific Condition 98.

Fuel supplier certification for No.2 oil fuel shall include the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c of 40 CFR 60. The certifications shall be kept on site, and shall be provided to Department personnel upon request.

- 86. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall not exceed natural gas usage throughput of 1,012,800,000 cubic feet for any consecutive twelve (12) month period.
- 87. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR 70.6, the permittee shall not exceed No.2 fuel oil throughput of 1,211,000 gallons for any consecutive twelve (12) month period.
- 88. Pursuant to \$19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limits set in Specific Conditions 86 and Specific Condition 87 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 89. Pursuant to \$18.5 of Regulation 18, the permittee shall not exceed 5% opacity from SN-16, SN-17, and SN-18 while burning natural gas, and the permittee shall not exceed 20% opacity from SN-16 and SN-17 while burning No.2 fuel oil<sup>1</sup>. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 90 and 91.
- 90. Pursuant to \$19.7 of Regulation 19 and 40 CFR 52, Subpart E, the permittee shall conduct weekly observations of the opacity from SN-16, SN-17, and SN-18 while burning natural gas. If visible emissions are detected, then the permittee shall immediately conduct a 6-minute opacity reading in accordance with EPA Reference Method 9. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 53.
- 91. Pursuant to §19.7 of Regulation 19 and 40 CFR 52, Subpart E, in the event the permittee burns fuel oil for three (3) hours or more in any consecutive 24 hour period or a total of 14

<sup>&</sup>lt;sup>1</sup> The opacity from SN-18 while burning No.2 fuel oil is limited by Specific Condition 100.

hours<sup>1</sup> or more in any consecutive 12 month period, the permittee shall conduct a 6-minute opacity reading from each boiler while burning No. 2 fuel oil. Should the burning of fuel oil continue for seven (7) or more consecutive days, the permittee shall conduct a 6-minute opacity reading from each boiler again on the seventh day and every seven (7) days thereafter as long as fuel oil is being burned.

- 92. Pursuant to \$19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records of the type of fuel burned in the boilers and opacity readings or observations which demonstrate compliance with the limits set in Specific Conditions 89 through 91 and may be used by the Department for enforcement purposes. The records shall be updated on a weekly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 93. Pursuant to \$19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall perform stack testing of SN-16 and SN-17 for carbon monoxide (CO) and nitrogen oxides (NO<sub>x</sub>) emissions while burning natural gas. Testing shall be performed no later than 180 days after the current permit is issued in accordance with Plantwide Condition 4 and EPA Reference Methods 10 & 7E, respectively, as found in 40 CFR, Part 60, Appendix A.
- 94. Pursuant to \$19.7 of Regulation 19, the permittee shall perform stack testing of SN-16 and SN-17 for carbon monoxide (CO) and nitrogen oxides (NO<sub>x</sub>) emissions while burning No.2 fuel oil. Testing shall be performed no later than sixty (60) days after the permittee burns 121,100 gallons (10 percent of the permitted annual throughput) or more of No.2 fuel oil for any consecutive 12 month period. Testing shall be performed in accordance with Plantwide Condition 4 and EPA Reference Methods 10 and 7E, respectively, as found in 40 CFR, Part 60, Appendix A.
- 95. Pursuant to 40 CFR 60.1(a) and 40 CFR 60.40c(a), boiler #3 (SN-18) is subject to provisions of 40 CFR, Part 60, Subpart A, General Provisions and 40 CFR, Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units due to proposed maximum design heat input capacity of 42.8 million Btu per hour. A copy of Subpart Dc is provided in appendix D. Applicable provisions of Subpart Dc are included in, but are not limited to, Specific Conditions listed below.

<sup>&</sup>lt;sup>1</sup> Burning fuel oil in all boilers for 14 hours represents less than one (1) percent of the total annual permitted fuel oil consumption.

- 96. Pursuant to 40 CFR 60, Subpart A, the permittee shall comply with the provisions of Subpart Dc according to the applicability of the standards of performance to the facility in Table 1 (current permit, Appendix E).
- 97. Pursuant to §60.8, §60.43c, and §60.45c of 40 CFR, Part 60, the permittee shall perform initial performance stack testing of SN-18 for opacity. Testing shall be performed in accordance with Plantwide Conditions 3 & 4 and EPA Reference Method 9 as found in 40 CFR, Part 60, Appendix A.<sup>1</sup>
- 98. Pursuant to \$60.42c of 40 CFR, Part 60, Subpart Dc, the permittee shall not combust oil in the boiler #3 (SN-18) that contains greater than 0.5 percent sulfur by weight.
- 99. Pursuant to §60.42c(h)(1) and §60.48c(f)(1) of 40 CFR Part 60, Subpart Dc, the permittee shall maintain certifications from the fuel supplier which demonstrate compliance with the limits set in Specific Condition 98 and may be used by the Department for enforcement purposes. Fuel supplier certification for No.2 oil fuel shall include the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c of 40 CFR 60. The certifications shall be kept on site, and shall be provided to Department personnel upon request.
- 100. Pursuant to §60.43c(c) and §60.45c(a)(7) of 40 CFR Part 60, Subpart Dc, the permittee shall not exceed 20% opacity from SN-18 while burning No.2 fuel oil. Opacity shall be measured by a certified personnel in accordance with EPA Reference Method 9 as found in 40 CFR Part 60 Appendix A.
- 101. Pursuant to \$60.48c(g) of 40 CFR, Part 60, Subpart Dc, the permittee shall keep records of each fuel combusted during each day.
- 102. Pursuant to \$19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 100 and may be used by the Department for enforcement purposes. The records shall be updated on a weekly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

<sup>&</sup>lt;sup>1</sup> Continual compliance with opacity limits from SN-18 is determined in Specific Conditions 91 and 92.

## SN-21: Ovens for Needles Covers

Source Description

PVC needle covers are sent to electric ovens for curing. The needle covers are heated in the ovens for about 45 minutes at 250EF. The following hazardous air pollutants (HAP) are emitted during the process: bis(2-ethylhexyl)phthalate (DEHP) and hydrogen chloride (HCl). There are eight (8) ovens. All ovens exhaust to the atmosphere through one stack (SN-21). The ovens were installed in 1986 and permitted as SN-21 through SN-27 in permit #544-AR-3.

#### **Specific Conditions**

103. Pursuant to §18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutants (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 65.

Source No.	НАР	Emission Rate (lb/hr)	Emission Rate (tpy)
21	DEHP	0.1	0.44
	HCl	0.1	0.44

- 104. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed a throughput of 48 million needle covers at SN-21 for any consecutive twelve month period.
- 105. Pursuant to §18.10 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 104 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

## SN-41: Grinding Operation

## Source Description

The waste plastic from the facility is ground into granular material suitable for recycling. Waste plastic is fed to a mechanical grinder. It is assumed that 98% of the plastic fed to the grinder is routed directly to silos. The remaining 2% is captured as particulate matter and routed through a cyclone to a baghouse (SN-41). The plastic captured by the cyclone is fed to the silos. The silos are controlled by the same baghouse. The equipment was installed in 1978. SN-41 was permitted for the first time in 1986 in permit No. 544-AR-3.

The additional plastic grinding operation is included in this permit modification. The proposed operation is similar to the existing one. The proposed grinder will emit through the same control equipment.

Emission rate changes associated with the current modification are shown in the following table.

Pollutant	Existing rate (TPY)	Net change (TPY)	Permitted rate (TPY)
PM/PM <sub>10</sub>	6.1	4.9	11.0

## Specific Conditions

106. Pursuant to §19.5 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall not exceed the annual emission rate set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 111.

Source	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
41	PM/PM <sub>10</sub>	2.5	11.0

107. Pursuant to §19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall perform stack testing of SN-41 for PM/PM<sub>10</sub> emissions. Testing shall be performed after the second grinder is installed in accordance with Plantwide Conditions 3 & 4 and EPA Reference Methods 1 through 5 as found in 40 CFR, Part 60, Appendix A.

- 108. Pursuant to §18.5 of Regulation 18, the permittee shall not exceed 5% opacity from SN-41. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Conditions 109 and 113.
- 109. Pursuant to \$19.7 of Regulation 19 and 40 CFR 52, Subpart E, the permittee shall conduct weekly observations of the opacity from SN-41. If visible emissions are detected, the permittee shall conduct a 6-minute opacity reading in accordance with EPA Reference Method 9.
- 110. Pursuant to §19.7 of Regulation 19 and 40 CFR 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limits set in Specific Conditions 108 and 109 and may be used by the Department for enforcement purposes. The records shall be updated on a weekly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 111. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed 11,700 ton of waste plastic being ground for any consecutive twelve month period.
- 112. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall maintain records which demonstrate compliance with Specific Condition 111 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 113. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall conduct preventive maintenance of the baghouse (SN-41) every 3 months. The preventive maintenance shall include the following: check filter bank for loose filter clamps; check filters for holes; check shaker system and linkage. Filters shall be changed as needed when indicative of preventive maintenance.
- 114. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with Specific Condition 113 and may be used by the Department for enforcement purposes. The records shall be updated every three months, shall be kept on site, and shall be provided to Department personnel upon request.

## SN-44: Paint Booth/Maintenance Painting

Source Description

Equipment painting is ongoing as part of routine maintenance. Facility painting can occur anywhere inside or outside of the plant. On some cases, pieces of equipment are brought into the paint booth for painting. Both solvent based and water based paints are used. Some paints contain volatile HAPs. All volatile HAPs in these paints have a relative toxicity of 1.0.

Paint booth was permitted first time in 1986, permit #544-AR-3.

Emission rate changes are shown in the following table.

Pollutant	Existing rate (TPY)	Net change (TPY)	Permitted rate (TPY)
VOC	5.7	6.3	12.0

## Specific Conditions

115. Pursuant to §19.5 of the Regulation 19, the permittee shall not exceed the emission rate set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 117.

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
44	VOC	60	12.0

116. Pursuant to §18.8 of the Regulation 18, the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Conditions 119 and 120.

Source	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
44	HAPs with relative toxicity 1.0	60	6.0

- 117. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, VOC content for all paint shall not exceed 24,000 pounds for any consecutive twelve month period.
- 118. Pursuant to §19.7 of Regulation 19, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 117 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request.
- 119. Pursuant to \$18.8 of Regulation 18, the permittee shall not use raw materials containing volatile hazardous air pollutants with relative toxicity less than 1.0.
- 120. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, HAP content for all raw materials shall not exceed 12,000 pounds for any consecutive twelve month period.
- 121. Pursuant to §18.10 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 maintain records which demonstrate compliance with the limits set in Specific Conditions 119 and 120 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

## SN-45: Grinder #1 SN-73: Grinder #2

## **Process Description**

The Needles process is used to produce and assemble needles for various blood collection products. The stainless steel cannula comes from a supplier. The cannula is taped and the tip is ground. Water used to cool the grinding wheel captures majority of PM generated. A hood over the grinding process captures some PM which is emitted to the atmosphere through the fabric filter (SN-45). The needles are manufactured from #304 stainless steel which contains 18-20% chromium and <2% manganese, both listed as inorganic HAP. The equipment was installed in 1986. SN-45 was permitted for the first time in 1986 in permit No. 544-AR-3. In 1994, SN-45 was removed from service (permit No. 544-AR-7).

Under this modification the permittee proposes installation of the second grinding process (SN-73) identical to the existing one.

Emission rate changes associated with the current modification are shown in the following table.

Pollutant	Existing rate (TPY)	Net change (TPY)	Permitted rate (TPY)
PM/PM <sub>10</sub> <sup>-1</sup>	0.0	1.0	1.0

## Specific Conditions

122. Pursuant to §19.5 of Regulation 19, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Conditions 124 and 126.

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
45	$PM/PM_{10}^{*}$	0.1	0.5
73	$PM/PM_{10}^*$	0.1	0.5

Revised: September 8, 1999

<sup>&</sup>lt;sup>1</sup> Including chromium and manganese compounds (inorganic HAP).

123. Pursuant to \$18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Conditions 124 and 126.

Source	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
45	Chromium Compounds	0.017	0.018
	Manganese Compounds	0.0017	0.0018
73	Chromium Compounds	0.017	0.018
	Manganese Compounds	0.0017	0.0018

- 124. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed 70,000,000 cannula throughput for any consecutive twelve month period.
- 125. Pursuant to §19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 124 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 126. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall conduct preventive maintenance of the baghouses (SN-45 and SN-73) every week. The filters shall be changed annually.
- 127. Pursuant to \$18.10 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 maintain records which demonstrate compliance with the limits set in Specific Condition 126 and may be used by the Department for enforcement purposes. The records shall be updated on a weekly basis, shall be kept on site, and shall be provided to Department personnel upon request.

## SN-72: Jet Cleaner

#### **Process Description**

The Jet Cleaner consists of a closed insulated chamber with internal heaters, into which parts are placed for cleaning. The Jet Cleaner cleans PVC and other residue polymers off of steel plates used in extrusion of plastic tubing/film. It cleans using a pyrolysis cleaning cycle at full vacuum followed by an oxidation cycle at reduced vacuum. All heat is provided by electric heating elements. A primary trap beneath the chamber collects polymer which drains from the parts. A secondary trap, fitted with water spray nozzles, condenses and collects vapors before they can enter the vacuum pump. There are two Jet Cleaners in the room. After the steel plates are removed from the cleaner, they are cooled and blasted using a totally enclosed glass-bead blaster. The unit vents inside the room.

There are two hoods located over each Jet Cleaner. Both hoods vent to the atmosphere through the same roof vent (SN-72).

#### Specific Conditions

128. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the hazardous air pollutant (HAP) emission rate set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 129.

Source	НАР	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
72	DEHP	0.03	0.1

- 129. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall not exceed 21,000 steel plates being cleaned during any consecutive twelve month period.
- 130. Pursuant to §18.10 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 maintain records which demonstrate compliance with the limit set in Specific Condition 129 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

#### SN-85: Print Shop

#### **Process Description**

The print shop prints miscellaneous forms and labels. The soybean based ink is used for printing. There is no VOC emitted from the ink. Varn is the chemical used as a cleaning agent for equipment and associated parts. Varn contains 15% methylene chloride (MeCl), a non-VOC listed HAP. The print shop also makes lead slugs for stamps and labels.

#### Specific Conditions

131. Pursuant to §19.5 of the Regulation 19, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 133.

Source No.	Pollutant	Emission Rate (lb/hr)	Emission Rate (tpy)
85	VOC	2.0	0.2

132. Pursuant to §18.8 of the Regulation 18, the permittee shall not exceed the hazardous air pollutant (HAP) emission rate set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 133.

Source	НАР	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
85	MeCl	0.3	0.02

- 133. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed usage of 50 gallons of Varn for any consecutive twelve month period.
- 134. Pursuant to §19.7 of Regulation 19, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 133 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

## SN-86: Chlorine Shed

## **Process Description**

Chlorine is used to chlorinate the plant water supply. The chlorination equipment is housed in a structure designed to provide protection from weather. This is not a point source. The chlorine is stored in 150 lb cylinders. There are two cylinders hooked up at any given time. The chlorine emissions from the shed (SN-86) occurs during cylinder change-out and a fitting or piping leak. The chlorine shed is equipped with an alarm set at 1 ppm.

## Specific Conditions

135. Pursuant to §18.8 of Regulation 18, the permittee shall not exceed the hazardous air pollutant (HAP) emission rate set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 136.

Source No.	НАР	Emission Rate (lb/hr)	Emission Rate (tpy)
86	Chlorine	0.5	0.05

- 136. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall not exceed usage of 27 chlorine cylinders for any consecutive twelve month period.
- 137. Pursuant to §18.10 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 maintain records which demonstrate compliance with the limit set in Specific Condition 136 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

## SN-89, SN-90: DEHP Storage Tanks

## **Process Description**

There are two 20,000 gallons storage tanks. Both tanks were installed in 1971. Both tanks are being permitted for the first time.

DEHP, bis(2-ethylhexyl)phtalate, is a listed HAP, CAS # 117-81-7. DEHP is used as a raw material in the Plastic process.

## Specific Conditions

138. Pursuant to \$18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 139.

Source No.	НАР	Emission Rate (lb/hr)	Emission Rate (tpy)
89	DEHP <sup>1</sup>	0.5	0.1
90	DEHP *	0.5	0.1

- 139. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall not exceed a total DEHP throughput of 39,200,000 pounds (4,750,000 gallons) for any consecutive twelve month period.
- 140. Pursuant to §18.10 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 maintain records which demonstrate compliance with the limit set in Specific Condition 139 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

<sup>&</sup>lt;sup>1</sup> DEHP is also a volatile organic compound (VOC)

## SN-91: Pallet Treatment Process SN-93, SN-99: Pallet Treatment Process

#### **Process Description**

Wooden shipping pallets have been identified as a possible contributor to an insect infestation within the facility.

A dry kiln chamber (SN-91) was permitted (permit No. 544-AR-9) for heat treatment of the pallets. The pallets should be heated at approximately 150EF up to 5 hours. It is a batch process. Heating is provided by 880,000 BTU/hr furnace burning natural gas. Air and products of combustion are circulated during the treatment. There are two vents on the top of the kiln to release pressure over 10 psig. Venting to the atmosphere takes place during unloading operations through the door. VOC emissions are associated with the heat treatment of hardwood in dry kilns.

An oven chamber (SN-93, SN-99) is a new source included in the current modification. Heat is provided from the plant boilers (SN-16, SN-17). It is also a batch process. VOC will be vented through a stack and through a door during unloading operations.

**Specific Conditions** 

141. Pursuant to §19.5 of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control (Regulation 19), the permittee shall not exceed the emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Conditions 142 and 143.

Source	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
91	PM/PM <sub>10</sub>	0.1	0.1
	VOC	11.2	1.1
	CO	0.1	0.1
	NO <sub>x</sub>	0.5	0.1
93, 99	VOC	2.5	0.8

142. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed a total hardwood pallets throughput of 2,150,400 board feet for any consecutive twelve month period for dry kiln (SN-91).

- 143. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed a total hardwood pallets throughput of 1,265,125 board feet for any consecutive twelve month period for oven chamber (SN-93, 99).
- 144. Pursuant to §19.5 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limits set in Specific Conditions 142 and 143 may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

## SN-92: DiaPES Dialyzer Manufacturing

**Process Description** 

Kidney Dialysis filters are to be manufactured with a new filter membrane known as DiaPES fibers (Polyethersulfone and Polyvinylpyrrolidone). These filters are processed by first loading DiaPES fibers and PET fibers (Polyethyleneterephtalate) to each dialyzer case. The DiaPES fibers are approximately 1" longer than the required length for centrifugal potting (gluing) of the urethane. The excess material is cut using a "hot wire" technique where a Nickel Chrome wire is heated by an electric current. The red hot wire acts as a knife. Both ends of the dialyzer are processed using the "hot wire" technique.

The rest of the process is similar to CF Dialyzer manufacturing (SN-04). After hot wire sealing, the Popcos (also known as Capcos), which are used for the urethane potting, are assembled to the loaded dialyzer cases (SN-02). Caps are attached by friction fit. The units are then vacuum-dried to remove moisture (SN-03). There are no regulated pollutants emitted from SN-02 and SN-03. The dialyzer cases are then sent to the Orbital centrifuge (SN-04) where the fibers are sealed in place with urethane. The urethane is made by mixing two pre-polymers, then mixture is injected into the filters. Liquids come in sealed drums, and VOC emissions during drum handling are considered insignificant and identified in the Section VI: De Minimis Emission Sources. One of the pre-polymers used to make urethane contains 5% 1,6-Hexamethylene diisocyanate (HMXDI), a listed HAP (CAS No. 822-06-0). A great majority of the HMXDI is incorporated into the product. Finally, the individual units are dry cut, pressure tested, and sent to packaging areas. Dry cutter emits inside the building. Air and water are used for pressure testing.

#### Specific Conditions

145. Pursuant to §19.5 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 147.

Source	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
92	PM/PM <sub>10</sub>	0.1	0.5
	SO <sub>2</sub>	0.1	0.5
	VOC	0.1	0.5
	CO	0.1	0.5

146. Pursuant to \$18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 147.

Source	Pollutants	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
92	HAP <sup>1</sup>	0.1	0.5

- 147. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed manufacturing of 3,500,000 kidney dialysis filters (DiaPES Dialyzers) during any consecutive twelve month period.
- 148. Pursuant to §19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 147 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

<sup>&</sup>lt;sup>1</sup> Content of specific chemicals is unknown.

## SN-95: Plastics Manufacturing

#### **Process Description**

<u>Blending.</u> Raw materials are received in both bulk and packaged for manufacturing of plastic film and tubing. The first step is blending. Resins, plasticizer and minor ingredients are combined in high intensity blender, ribbon blender or drum tumbler and mixed. The blend is then sent to the film extrusion area, pelletizing area, or exported to other locations for processing.

<u>Pelletizing</u>. Blend is extruded into pellets using extruders. Once pellets are produced they are sent to the tubing or film area or exported to other locations for processing.

<u>Tubing Extrusion</u>. Pellets or blend are fed to an extruder through a hopper. The extruder heats pellets or blend to melt and pumps the melt through a die to form tubing. The extruded tubing is fed through a water trough for cooling prior to being cut or spooled.

<u>Film.</u> Blend or pellets are received at film lines in hoppers or auto-transferred from blending. Blend or pellets are fed into an extruder where they are melted and pumped through a wide die forming a wide sheet. The sheet is fed through a chill roll stack to cool and then is fed through a winding system to spool into rolls. The rolls are sent to other areas or locations for further processing.

<u>Grinding.</u> Excess or scrapped plastic is fed into a grinder (SN-41). The ground material is fed into silos and later transferred to the blend area to be mixed with blend used for film production.

Small amounts of miscellaneous fugitive VOCs may result from the above described operations. The pollutant of concern is bis(2-ethylhexyl)phtalate (DEHP), a listed HAP. Fugitive DEHP emissions are captured with ventilation equipment from pelletizing, tubing extrusion, and film extrusion processes and routed to filters. Filters contain activated carbon that adsorbs DEHP. De minimis amounts of methyl ethyl ketone (a listed HAP) may also be emitted during above mentioned operations. A total of 15 filters are used in plastics manufacturing. The filters are either roof mounted or located within the building. In either case, effluent from the filters is routed back into the warehouse. As such, no emissions are directly discharged to the atmosphere, but rather are all <u>fugitive</u>. Also included in SN-95 are emissions from inside DEHP storage tanks.

The proposed maximum emission rates reflect increase of the plastics production rate. The actual fugitive VOC and HAP emission rates will increase approximately 30%.

The plastics manufacturing process was installed in 1971. It was not permitted before.

#### **Specific Conditions**

149. Pursuant to §19.5 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 151.

Source	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
95	VOC	2.0	8.9

150. Pursuant to §18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 153.

Source	Pollutants	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
95	DEHP	1.21	4.57

- 151. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, 40 CFR 70.6, the permittee shall not exceed manufacturing of 100,000,000 pounds of plastic pellets/tubing and 150,000,000 pounds of plastic sheeting during any consecutive twelve month period.
- 152. Pursuant to §19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 151 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 153. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall not exceed a total throughput of 39,200,000 pounds of DEHP during any consecutive twelve month period.

- 154. Pursuant to \$18.10 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 maintain records which demonstrate compliance with the limit set in Specific Condition 153 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 155. Pursuant to \$18.8 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 not emit any hazardous air pollutants from SN-95 other than DEHP and methyl ethyl ketone<sup>1</sup>.
- 156. Pursuant to \$18.10 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 maintain material safety data sheets (MSDS) on all resins, plasticizers, solvents, and minor ingredients used at the plastics manufacturing process which demonstrate compliance with the limit set in Specific Condition 155 and may be used by the Department for enforcement purposes. The data sheets shall be kept on site and shall be provided to Department personnel upon request.
- 157. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall conduct preventive maintenance of the Farr Absolute HEPA filters quarterly. The activated carbon shall be changed every eighteen (18) months.
- 158. Pursuant to §18.10 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 maintain records which demonstrate compliance with Specific Condition 157 and may be used by the Department for enforcement purposes. The records shall be kept on site and shall be provided to Department personnel upon request.

<sup>&</sup>lt;sup>1</sup> Emissions of methyl ethyl ketone are bubbled throughout the plant and limited by Specific Condition 160.

## SN-97: Plant Fugitive VOC Emissions

**Process Description** 

The facility produces disposable medical products including blood bags, kidney dialysis sets, needles, and molded parts. In addition, the plant produces large volumes of medical grade plastics. As a result of these operations, many sources of fugitive VOC emissions are located throughout the plant. The fugitive VOC emissions result from sets assembly, cleaning operations, needles manufacturing and small miscellaneous uses.

Currently, the facility annually consumes 220,000 pounds of VOC (excluding ethylene oxide and DEHP, which are HAPs and tracked separately) and collects and ships offsite 67,500 pounds of VOC. 14,000 pounds of VOC are emitted annually through stacks (SN-04, SN-07, SN-09, SN-95). The rest of VOC evaporate within the building and is released to the atmosphere through doors, windows, and other openings. It is proposed to bubble all plant fugitive VOC emissions as a single source. The annual emission rate is estimated according to the following equation:

Fugitive VOC = VOC usage - VOC collected - VOC released through stacks = 138,500 lb/yr.

The facility estimates that it will increase consumption of VOC up to 440,000 pounds per year by the end of the 5-year period this permit is valid. Therefore, it is estimated that fugitive emissions will double over five year period.

#### Specific Conditions

159. Pursuant to §19.5 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. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 161.

Source	Pollutant	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
97	VOC	230	148.5

160. Pursuant to \$18.8 of the Arkansas Air Pollution Control Code (Regulation 18), the permittee shall not exceed the hazardous air pollutant (HAP) emission rates set forth in the following table. Compliance with this Specific Condition shall be demonstrated through compliance with Specific Condition 163.

Source	Pollutants	Emission Rate	Emission Rate
No.		(lb/hr)	(tpy)
97	Methyl Ethyl Ketone	5.0	2.0

- 161. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6, the permittee shall not exceed a total usage of 440,000 pounds of VOCs (excluding ethylene oxide and DEHP) during any consecutive twelve month period.
- 162. Pursuant to \$19.7 of Regulation 19 and 40 CFR, Part 52, Subpart E, the permittee shall maintain records of fugitive VOC emissions which demonstrate compliance with the limits set in Specific Conditions 159 and may be used by the Department for enforcement purposes. The emissions shall be calculated according to the following formula:

Fugitive VOC = VOC usage - VOC collected - 14,000 lbs<sup>1</sup>

The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.

- 163. Pursuant to \$18.10 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 not exceed a total usage of 4,000 pounds of methyl ethyl ketone during any consecutive twelve month period.
- 164. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall maintain records of methyl ethyl ketone usage which demonstrate compliance with the limits set in Specific Condition 163 and may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with Plantwide Condition 7 and General Provision 7.
- 165. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall maintain material safety data sheets (MSDS) of all volatile organic compounds (VOC) used at the facility. The records shall be kept on site and shall be provided to Department personnel upon request.

<sup>&</sup>lt;sup>1</sup> 14,000 lbs is a conservative estimation of annual combined stack VOC emissions.

## SECTION V: PLANTWIDE CONDITIONS

- Pursuant to \$19.4(o) of Regulation 19, 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 \$19.4(q) of Regulation 19, construction must commence within eighteen (18) months after the approval of the permit application. Records must be kept for two years which will enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset condition, and continuous monitoring data. The records may be used, at the discretion of the Department, to determine compliance with the conditions of the permit.
- 3. Pursuant to \$19.7 of Regulation 19, each emission point for which an emission test method is specified in this permit shall be tested in order to determine compliance with the emission limitations contained herein 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. 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. 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
- 4. Pursuant to \$19.7(b)(4) of Regulation 19, unless otherwise approved by the Department, all air contaminant emissions sampling shall be performed with the equipment being tested operating at least at 90% of its permitted capacity. Emissions results shall be extrapolated to correlate with 100% of permitted capacity to determine compliance. Failure to test at the permitted capacity shall limit the facility to 10 percent above the tested capacity.
- 5. Pursuant to 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.

- 6. Pursuant to A.C.A. §8-4-203 as referenced by A.C. A. §8-4-304 and §8-4-311, current permit supersedes and voids all previously issued air permits. Permit #544-AR-9 is hereby void.
- 7. Pursuant to 40 CFR 70.6(a)(3)(iii)(A) and §26.7 of Regulation 26, the first reporting period shall end on the last day of the six months anniversary of this permit. The permittee shall submit first report of all required monitoring within 30 days of the end of the first reporting period. The first report shall contain six months of data. The following reports shall be submitted in accordance with General Provision 7.

Title VI Provisions:

- 8. 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 is 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 interstate commerce pursuant to §82.106.
  - b. The placement of 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 requirements pursuant to §82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 9. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, excepts 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 m ore pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 10. If the permittee manufactures, transforms, 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.
- 11. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant 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 system used on passenger buses using HCFC-22 refrigerant.

12. 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.

#### Permit Shield:

13. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in item A of this condition:

A. The following have been specifically identified as applicable requirements based upon information submitted by the permittee in an application dated June 25, 1996.

Source No.	Regulation	Description
Facility	Arkansas Regulation 19	Compilation of Regulations of the Arkansas State Implementation Plan for Air Pollution Control
Facility	Arkansas Regulation 26	Regulations of the Arkansas Operating Air Permit Program
SN-07	40 CFR, Part 82	Protection of Stratospheric Ozone
SN-18	40 CFR, Part 60, Subpart A	Standards of Performance for New Stationary Sources. General Provisions
SN-18	40 CFR, Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial- Institutional Steam Generating Units
SN-58	40 CFR, Part 63, Subpart A	National Emission Standards for Hazardous Air Pollutants for Source Categories. General Provisions.
SN-58	40 CFR, Part 63, Subpart O	Ethylene Oxide Emissions Standards for Sterilization Facilities
SN-74 through SN-83	40 CFR, Part 63, Subpart A	National Emission Standards for Hazardous Air Pollutants for Source Categories. General Provisions.
SN-74 through SN-83	40 CFR, Part 63, Subpart O	Ethylene Oxide Emissions Standards for Sterilization Facilities
SN-94	40 CFR, Part 63, Subpart A	National Emission Standards for Hazardous Air Pollutants for Source Categories. General Provisions.
SN-94	40 CFR, Part 63, Subpart O	Ethylene Oxide Emissions Standards for Sterilization Facilities

B. The following requirements have been specifically identified as not applicable, based upon information submitted by the permittee in an application dated June 25, 1996.

Source	Regulation	Description	Basis for Determination
SN-16, SN-17	40 CFR, Part 60, Subpart Dc	Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units	Boilers were constructed in 1964 and 1975 respectfully.
SN-89 and SN-90	40 CFR, Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 1, 1973, and Prior to May 19, 1978.	Both tanks were constructed in 1971.
SN-100	40 CFR, Part 60, Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 1, 1973, and Prior to May 19, 1978.	The storage tank's capacity is less than 40,000 gal.

C. Nothing shall alter or affect the following:

Provisions of Section 303 of the Clean Air Act;

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

The applicable requirements of the acid rain program, consistent with section 408(a) of the Clean Air Act; or

The ability of the EPA to obtain information under Section 114 of the Clean Air Act.

#### SECTION VI: DE MINIMIS EMISSION SOURCES

Pursuant to §19.4(e) of Regulation 19 as referenced by §3(d) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), the following sources are below the de minimis emission levels. Insignificant and trivial activities will be allowable after approval and federal register notice publication of a final list as part of the operating air permit program. Any activity for which a state or federal applicable requirement applies is not de minimis, even if this activity meets the criteria of §3(d) of Regulation 26 or is listed below. De minimis emission determinations rely upon the information submitted by the permittee in an application dated June 25, 1996.

- 1. Resin Storage Silo 3A (former SN-59).
- 2. Resin Storage Silo 4A (former SN-60).
- 3. Resin Storage Silo 4B (former SN-61).
- 4. Resin Storage Silo 5 (former SN-62).
- 5. Resin Storage Silo 3B (former SN-63).
- 6. Resin Storage Silo 3C (former SN-64).
- 7. Resin Storage Silo (former SN-65).
- 8. Resin Storage Silo (former SN-66).
- 9. Chillers #1-3 (former SN-67).
- 10. Chiller #5 (former SN-68).
- 11. Chiller #4 (former SN-69).
- 12. Needles Silicone.
- 13. Needles Cleaning/Electropolishing.
- 14. E-beam Ionizing Radiation.
- 15. Cell Separator Coiling Operation.
- 16. Vacuum Pumps.
- 17. Dust Collector (PE172) Home Choice.
- 18. 30,000 gal Emergency Fuel Oil #2 Storage Tank (empty under normal conditions).
- 19. 570 gal Diesel Fuel Tank.
- 20. 300 gal Diesel Fuel Tank.
- 21. Linseed Oil, Epoxidized (LOE) Storage Tank.
- 22. Linseed Oil, Epoxidized (LOE) Storage Tank.
- 23. Linseed Oil, Epoxidized (LOE) Storage Tank.
- 24. Linseed Oil, Epoxidized (LOE) Storage Tank.
- 25. Epoxol Storage Tank.
- 26. Epoxol Storage Tank.
- 27. Epoxol Storage Tank.
- 28. Vikoflex Storage Tank.
- 29. Vikoflex Storage Tank.

- 30. Citroflex Storage Tank.
- 31. Citroflex Storage Tank.
- 32. Vikoflex Storage Tank.
- 33. Vikoflex Storage Tank.
- 34. Laboratories.
- 35. Nitric Acid Tanks.
- 36. Sodium Hydroxide Tanks.
- 37. 500 gal Propane Tank.
- 38. Cyclo Station in Fenwal.
- 39. Dextrose Solution Tank.
- 40. Salt Tank.
- 41. Salt Brine Tank.
- 42. Distilled Water Tank.
- 43. De-aeration Tank.
- 44. Isolex 300 Process.
- 45. Molding Process.
- 46. Needle Blasting.
- 47. PHAPs (Particulate Hazardous Air Pollutants) paint usage.
- 48. Diapes Dialyzer Drying System.

Pursuant to §19.4(e) of Regulation 19 as referenced by §3(d) of Regulation 26, the following emission units, operations, or activities have been determined by the Department to be below the de minimis emission levels. Activities included in this list are allowable under this permit and need not be specifically identified.

- 1. Natural gas-burning equipment with a design rate less than 1 million BTU per hour.
- 2. Combustion emissions from propulsion of mobile sources and emissions from refueling these sources unless regulated by Title II and required to obtain a permit under Title V of the federal Clean Air Act, as amended. This does not include emissions from any transportable units, such as temporary compressors or boilers. This does not include emission from loading racks or fueling operations covered under any applicable federal requirements.
- 3. Air conditioning and heating units used for comfort that do not have applicable requirements under Title VI of the Act.
- 4. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing/industrial or commercial process.

- 5. Non-commercial food preparation or food preparation at restaurants, cafeterias, or caterers, etc.
- 6. Consumer use of office equipment and products, not including commercial printers or businesses primarily involved in photographic reproduction.
- 7. Janitorial services and consumer use of janitorial products.
- 8. Internal combustion engines used for landscaping purposes.
- 9. Laundry activities, except for dry-cleaning and steam boilers.
- 10. Bathroom/toilet emissions.
- 11. Emergency (backup) electrical generators at residential locations.
- 12. Tobacco smoking rooms and areas.
- 13. Blacksmith forges.
- 14. Maintenance of grounds or buildings, including: lawn care, weed control, pest control, and water washing activities.
- 15. Repair, up-keep, maintenance, or construction activities not related to the sources' primary business activity, and not otherwise triggering a permit modification. This may include, but is not limited to such activities as general repairs, cleaning, painting, welding, woodworking, plumbing, re-tarring roofs, installing insulation, paved/paving parking lots, miscellaneous solvent use, application of refractory, or insulation, brazing, soldering, the use of adhesives, grinding, and cutting.<sup>1</sup>
- 16. Surface-coating equipment during miscellaneous maintenance and construction activities. This activity specifically does not include any facility whose primary business activity is surface-coating or includes surface coating or products.

<sup>&</sup>lt;sup>1</sup> Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must get a permit.

- 17. Portable electrical generators that can be "moved by hand" from one location to another.<sup>1</sup>
- 18. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning, or machining wood, metal, or plastic.
- 19. Brazing or soldering equipment related to manufacturing activities that do not result in emission of HAPs.<sup>2</sup>
- 20. Air Compressors and pneumatically operated equipment, including hand tools.
- 21. Batteries and battery charging stations, except at battery manufacturing plants.
- 22. Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOCs or HAPs.<sup>3</sup>
- 23. Containers of less than or equal to 5 gallons in capacity that do not emit any detectable VOCs or HAPs when closed. This includes filling, blending, or mixing of the contents of such containers by a retailer.
- 24. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and non-volatile aqueous salt solutions, provided appropriate lids and covers are used and appropriate odor control is achieved.
- 25. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and non-volatile aqueous salt solution, provided appropriate lids and covers are used and appropriate odor control is achieved.
- 26. Drop hammers or presses for forging or metalworking.

<sup>&</sup>lt;sup>1</sup> "Moved by hand" means that it can be moved by one person without assistance of any motorized or nonmotorized vehicle, conveyance, or device.

<sup>&</sup>lt;sup>2</sup> Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are more appropriate for treatment as insignificant activities based on size or production thresholds. Brazing, soldering, and welding equipment, and cutting torches related directly to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately.

<sup>&</sup>lt;sup>3</sup> Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids are based on size and limits including storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.

- 27. Equipment used exclusively to slaughter animals, but not including other equipment at slaughter-houses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
- 28. Vents from continuous emission monitors and other analyzers.
- 29. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
- 30. Hand-held applicator equipment for hot melt adhesives with no VOCs in the adhesive.
- 31. Equipment used for surface coating, painting, dipping, or spraying operations, containing less than 0.4 lb/gal VOCs, has no hexavalent chromium, and emits no more than 0.1 tpy of all other HAPs.
- 32. Lasers used only on metals and other materials which do not emit HAPs in the process.
- 33. Consumer use of paper trimmers/binders.
- 34. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boiler delivering the steam.
- 35. Salt baths using non-volatile salts that do not result in emissions of any air pollutant covered by this regulation.
- 36. Laser trimmers using dust collection to prevent fugitive emissions.
- 37. Bench-scale laboratory equipment used for physical or chemical analysis.
- 38. Routine calibration and maintenance of laboratory equipment or other analytical instruments.
- 39. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
- 40. Hydraulic and hydrostatic testing equipment.
- 41. Environmental chambers not using hazardous air pollutant gases.
- 42. Shock chambers, humidity chambers and solar simulators.

- 43. Fugitive emissions related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
- 44. Process water filtration systems and demineralizers.
- 45. Demineralized water tanks and demineralizer vents.
- 46. Boiler water treatment operations, not including cooling towers.
- 47. Emissions from storage or use of water treatment chemicals, except for hazardous air pollutants or pollutants listed under regulations promulgated pursuant to Section 112(r) of the Act, for use in cooling towers, drinking water systems, and boiler water/feed systems.
- 48. Oxygen scavenging (de-aeration) of water.
- 49. Ozone generators.
- 50. Fire suppression systems.
- 51. Emergency road flares.
- 52. Steam vents and safety relief valves.
- 53. Steam leaks.
- 54. Steam cleaning operations.
- 55. Steam and microwave sterilizers.
- 56. Site assessment work to characterize waste disposal or remediation sites.
- 57. Miscellaneous additions or upgrades of instrumentation.
- 58. Emissions from combustion controllers or combustion shutoff devices.
- 59. Use of products for the purpose of maintaining motor vehicles operated by the facility, not including air cleaning units or such vehicles (i.e. antifreeze, fuel additives).
- 60. Stacks or vents to prevent escape of sanitary sewer gases through the plumbing traps.

- 61. Emissions from equipment lubricating systems (i.e. oil mist), not including storage tanks, unless otherwise exempt.
- 62. Residential wood heaters, cookstoves, or fireplaces.
- 63. Barbecue equipment or outdoor fireplaces used in conjunction with any residential or recreational use.
- 64. Log wetting areas and log flumes.
- 65. Periodic use of pressurized air for cleanup.
- 66. Solid waste dumpsters.
- 67. Emissions of wet lime from lime mud tanks, lime mud washers, lime mud piles, lime mud filter and filtrate tanks, and lime mud slurry tanks.
- 68. Natural gas odoring activities unless the Department determines that a nuisance may occur.
- 69. Emissions from engine crankcase vents.
- 70. Storage tanks used for the temporary containment of materials resulting from an emergency reporting of an unanticipated release.
- 71. Equipment used exclusively to mill or grind coatings in roll grinding rebuilding, and molding compounds where all materials charged are in paste form.
- 72. Mixers, blenders, roll mills, or calenders for rubber or plastic for which no materials in powder form are added and in which no organic solvents, diluents, or thinners are used.
- 73. The storage, handling, and handling equipment for bark and wood residues not subject to fugitive dispersion offsite (this applies to equipment only).
- 74. Maintenance dredging of pulp and paper mill surface impoundments and ditches containing cellulosic and cellulosic derived biosolids and inorganic materials such as lime, ash, or sand.
- 75. Tall oil soap storage, skimming, and loading.
- 76. Water heaters used strictly for domestic (non-process) purposes.

- 77. Facility roads and parking areas, unless necessary to control offsite fugitive emissions.
- 78. Agricultural operations, including onsite grain storage.

#### SECTION VII: GENERAL PROVISIONS

- 1. Pursuant to 40 C.F.R. 70.6(b)(2), any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 as the 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 as the origin of and authority for the terms or conditions sincluded in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
- 2. Pursuant to 40 C.F.R. 70.6(a)(2) and §26.7 of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), 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 §26.4 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 C.F.R. 70.6(a)(1)(ii) and §26.7 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 C.F.R. 70.6(a)(3)(ii)(A) nothing in this permit shall alter or affect the following:
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
  - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

- 6. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(B) and §26.7 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 C.F.R. 70.6(a)(3)(iii)(A) and §26.7 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 Pollution Control and Ecology Air Division ATTN: Compliance Inspector Supervisor Post Office Box 8913 Little Rock, AR 72219

- 8. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B), §26.7 of Regulation #26, and §19.6 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 within 24 hours of discovery of the occurrence. The initial report may be made by telephone and shall include:
  - a. The facility name and location,
  - b. The process unit or emission source which is deviating from the permit limit,
  - c. The permit limit, including the identification of pollutants, from which deviation occurs,
  - d. The date and time the deviation started,
  - e. The duration of the deviation,
  - f. The average emissions during the deviation,
  - g. The probable cause of such deviations,
  - h. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
  - i. 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) within 24 hours of discovery of the occurrence and such report will serve as both the initial report and full report.

- 9. Pursuant to 40 C.F.R. 70.6(a)(5) and §26.7 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 C.F.R. 70.6(a)(6)(i) and §26.7 of Regulation #26, the permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance 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.
- 11. Pursuant to 40 C.F.R. 70.6(a)(6)(ii) and §26.7 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 C.F.R. 70.6(a)(6)(iii) and §26.7 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 C.F.R. 70.6(a)(6)(iv) and §26.7 of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.
- 14. Pursuant to 40 C.F.R. 70.6(a)(6)(v) and §26.7 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 C.F.R. 70.6(a)(7) and §26.7 of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.
- 16. Pursuant to 40 C.F.R. 70.6(a)(8) and §26.7 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 C.F.R. 70.6(a)(9)(i) and §26.7 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 C.F.R. 70.6(b) and §26.7 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 C.F.R. 70.6(c)(1) and §26.7 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 C.F.R. 70.6(c)(2) and §26.7 of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:
  - a. 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;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- d. 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 C.F.R. 70.6(c)(5) and §26.7 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:
  - a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The compliance status;
  - c. Whether compliance was continuous or intermittent;
  - d. 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
  - e. 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 \$26.7 of Regulation #26, nothing in this permit shall alter or affect the following:
  - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with \$408(a) of the Act; or
  - d. 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

# **APPENDIX B**

Reference	Applicability	Comment
63.1(a)(1)	Yes	Additional terms defined in § 63.361; when overlap between subparts A and O occurs, subpart O takes precedence.
63.1(a)(2)	Yes	
63.1(a)(3)	Yes	
63.1(a)(4)	Yes	Subpart O clarifies the applicability of each paragraph in subpart A to sources subject to subpart O
63.1(a)(5)	No	Reserved
63.1(a)(6)	Yes	
63.1(a)(7)	Yes	
63.1(a)(8)	Yes	
63.1(a)(9)	No	Reserved
63.1(a)(10)	Yes	
63.1(a)(11)	Yes	§ 63.366(a) of subpart O also allows report submissions via fax and on electronic media.
63.1(a)(12)-(14)	Yes	
63.1(b)(1)-(2)	Yes	
63.1(b)(3)	No	§ 63.367 clarifies the applicability of recordkeeping requirements for sources that determine they are not subject to the emissions standards.
63.1(c)(1)	Yes	Subpart O clarifies the applicability of each paragraph in subpart A to sources subject to subpart O in this table.
63.1(c)(2)	Yes	Subpart O also specifies which sources are required to obtain a Title V permit in § 63.360.
63.1(c)(3)	No	Reserved
63.1(c)(4)	Yes	
63.1(c)(5)	No	§ 63.360 specifies applicability.
63.1(d)	No	Reserved
63.1(e)	Yes	
63.2	Yes	Additional terms defined in § 63.361; when overlap between subparts A and O occurs, subpart O takes precedence.
63.3	Yes	Other units used in subpart O are defined in the text of subpart O.
63.4(a)(1)-(3)	Yes	
63.4(a)(4)	No	Reserved
63.4(a)(5)	Yes	
63.4(b)	Yes	
63.4(c)	Yes	
63.5(a)	No	§ 63.366(b)(1) contains applicability requirements for constructed or reconstructed sources.

TABLE 1.	40 CFR, Par	rt 63, Subpart A	A applicability to	Baxter Healthcare	Corporation
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Reference	Applicability	Comment
63.5(b)(1)	Yes	
63.5(b)(2)	No	Reserved
63.5(b)(3)	No	See § 63.366(b)(2)
63.5(b)(4)	Yes	
63.5(b)(5)	Yes	
63.5(b)(6)	Yes	
63.5(c)	No	Reserved
63.5(d)(1)-(2)	No	See § 63.366(b)(3).
63.5(d)(3)-(4)	Yes	
63.5(e)	Yes	
63.5(f)(1) and (2)	No	See § 63.366(b)(4).
63.6(a)(1)	Yes	
63.6(a)(2)	No	§ 63.360 specifies applicability.
63.6(b) and (c)	No	§ 63.360(g) specifies compliance dates for sources.
63.6(d)	No	Reserved
63.6(e)	No	Subpart O does not contain any operation and maintenance plan requirements.
63.6(f)(1)	No	§ 63.362(b) specifies when the standards apply.
63.6(f)(2) (i)	Yes	
63.6(f)(2) (ii)	No	§ 63.363 specifies parameters for determining compliance.
63.6(f)(2)(iii)-(iv)	Yes	
63.6(f)(2)(v)	No	
63.6(f)(3)	Yes	
63.6(g)	Yes	
63.6(h)	No	Subpart O does not contain any opacity or visible emission standards.
63.6(i)(1)-(14)	Yes	
63.6(i)(15)	No	Reserved
63.6(i)(16)	Yes	
63.6(j)	Yes	
63.7(a)(1)	Yes	
63.7(a)(2)	No	§ 63.365(a)(2) specifies performance test dates.
63.7(a)(3)	Yes	
63.7(b)	Yes	
63.7(c)	Yes	
63.7(d)	Yes	

Reference	Applicability	Comment
63.7(e)	Yes	§ 63.365 also contains test methods specific to sources subject to the emissions standards.
63.7(f)	Yes	
63.7(g)(1)	Yes	
63.7(g)(2)	No	Reserved
63.7(g)(3)	Yes	
63.7(h)	Yes	
63.8(a)(1)	Yes	
63.8(a)(2)	Yes	
63.8(a)(3)	No	Reserved
63.8(a)(4)	Yes	
63.8(b)(1)	Yes	
63.8(b)(2)	Yes	
63.8(b)(3)	No	
63.8(c)(1)(i) and (ii)	No	A startup, shutdown, and malfunction plan is not required for these standards.
63.8(c)(1)(iii)	Yes	
63.8(c)(2)-(3)	Yes	
63.8(c)(4)-(5)	No	Frequency of monitoring measurements is provided in § 63.364; opacity monitors are not required for these standards.
63.8(c)(6)	No	Performance specifications for gas chromatographs and temperature monitors are contained in § 63.365.
63.8(c)(7)(i)(A)-(B)	No	Performance specifications for gas chromatographs and temperature monitors are contained in § 63.365.
63.8(c)(7)(i)(C)	No	Opacity monitors are not required for these standards.
63.8(c)(7)(ii)	No	Performance specifications for gas chromatographs and temperature monitors are contained in § 63.365.
63.8(c)(8)	No	
63.8(d)	Yes	
63.8(e)(1)	Yes	
63.8(e)(2)	Yes	
63.8(e)(3)	Yes	
63.8(e)(4)	Yes	
63.8(e)(5)(i)	Yes	
63.8(e)(5)(ii)	No	Opacity monitors are not required for these standards.
63.8(f)(1)-(5)	Yes	
63.8(f)(6)	No	
63.8(g)(1)	Yes	

Reference	Applicability	Comment
63.8(g)(2)	No	
63.8(g)(3)-(5)	Yes	
63.9(a)	Yes	
63.9(b)(1)(i)	Yes	
63.9(b)(1)(ii)-(iii)	No	§ $63.366(c)(1)(i)$ contains language for sources that increase usage such that the source becomes subject to the emissions standards.
63.9(b)(2)-(3)	Yes	63.366(c)(3) contains additional information to be included in the initial report for existing and new sources.
63.9(b)(4)-(5)	No	§ 63.366(c)(1)(ii) and (iii) contains requirements for new or reconstructed sources subject to the emissions standards.
63.9(c)	Yes	
63.9(d)	No	
63.9(e)	Yes	
63.9(f)	No	Opacity monitors are not required for these standards.
63.9(g)(1)	Yes	
63.9(g)(2)-(3)	No	Opacity monitors and relative accuracy testing are not required for these standards.
63.9(h)(1)-(3)	Yes	
63.9(h)(4)	No	Reserved
63.9(h)(5)	No	§ 63.366(c)(2) instructs sources to submit actual data.
63.9(h)(6)	Yes	
63.9(i)	Yes	
63.9(j)	Yes	
63.10(a)	Yes	
63.10(b)(1)	Yes	
63.10(b)(2)(i)	No	Not applicable due to batch nature of the industry.
63.10(b)(2)(ii)	Yes	
63.10(b)(2)(iii)	No	
63.10(b)(2)(iv)-(v)	No	A startup, shutdown, and malfunction plan is not required for these standards.
63.10(b)(2)(vi)-(xiv)	Yes	
63.10(b)(2)(xiii)	No	
63.10(b)(2)(xiv)	Yes	
63.10(b)(3)	No	§ 63.367(b) and (c) contains applicability determination requirements.
63.10(c)(1)	Yes	
63.10(c)(2)-(4)	No	Reserved
63.10(c)(5)	Yes	

Reference	Applicability	Comment
63.10(c)(6)	No	
63.10(c)(7)	No	Not applicable due to batch nature of the industry.
63.10(c)(8)	Yes	
63.10(c)(9)	No	Reserved
63.10(c)(10)-(13)	Yes	
63.10(c)(14)	Yes	
63.10(c)(15)	No	A startup, shutdown, and malfunction plan is not required for these standards.
63.10(d)(1)	Yes	
63.10(d)(2)	Yes	
63.10(d)(3)	No	Subpart O does not contain opacity or visible emissions standards.
63.10(d)(4)	Yes	
63.10(d)(5)	No	A startup, shutdown, and malfunction plan is not required for these standards.
63.(10)(e)(1)	Yes	
63.10(e)(2)(i)	Yes	
63.10(e)(2)(ii)	No	Opacity monitors are not required for these standards.
63.10(e)(3)(i)-(iv)	Yes	
63.10(e)(3)(v)	No	§ 63.366(a)(3) specifies contents and submittal dates for excess emissions and monitoring system performance reports.
63.10(e)(3)(vi)-(viii)	Yes	
63.10(e)(4)	No	Opacity monitors are not required for these standards.
63.10(f)	Yes	
63.11	Yes	
63.12-63.15	Yes	

# **APPENDIX C**

Reference	Applicability	Comment
§ 63.360(a)	Yes	
§ 63.360(b)-(e)	No	
§ 63.360(f)	Yes	
§ 63.360(g)(1)	Yes	
§ 63.360(g)(2)-(3)	No	
§ 63.361	Yes	When overlap between subparts A and O occurs, subpart O takes precedence.
§ 63.362(a)-(d)	Yes	
§ 63.362(e)(1)	Yes	
§ 63.362(e)(2)	No	
§ 63.363(a)(1)-(2)	Yes	
§ 63.363(b)(1)(i)	Yes	The facility is going to continue to use the acid-water scrubber to control emissions from sterilization chamber vents.
§ 63.363(b)(1)(ii)	No	
§ 63.363(b)(2)(i)	Yes	The facility is going to continue to use the acid-water scrubber to control emissions from sterilization chamber vents.
§ 63.363(b)(2)(ii)	No	
§ 63.363(c)(1)-(2)	Yes	
§ 63.363(c)(3)(i)	No	
§ 63.363(c)(3)(ii)	Yes	
§ 63.363(d)(1)	Yes	
§ 63.363(d)(2)	No	
§ 63.363(e)-(f)	No	
§ 63.364(a)(1)-(2)	Yes	
§ 63.364(b)(1)	No	
§ 63.364(b)(2)	Yes	The facility is going to continue to use the acid-water scrubber to control emissions from sterilization chamber vents.
§ 63.364(c)(1)	No	
§ 63.364(c)(2),(4)	Yes	
§ 63.364(c)(3)	No	
§ 63.364(d)	No	
§ 63.364(e)	No	
§ 63.364 (f)	Yes	
§ 63.365(a)-(c)	Yes	
§ 63.365 (d)(1)	Yes	
§ 63.365(d)(2)	No	

Table 2. 40 CFR, Part 63, Subpart O applicability to Baxter Healthcare Corporation.

Reference	Applicability	Comment
§ 63.365(e)(1)	No	
§ 63.365(e)(2)	Yes	The facility is going to continue to use the acid-water scrubber to control emissions from sterilization chamber vents.
§ 63.365(f)(1)	No	
§ 63.365(f)(2)	Yes	
§ 63.365(f)(3)	No	
§ 63.365(g)	No	
§ 63.365(h)	No	
§ 63.366(a)-(c)	Yes	
§ 63.367(a)	Yes	
§ 63.367(b)-(c)	No	

# **APPENDIX D**

# **APPENDIX E**

Reference	Applicability	Comment
§ 60.40c	Yes	
§ 60.41c	Yes	
§ 60.42c(a)-(c)	No	
§ 60.42c(d)	Yes	
§ 60.42c(e)-(g).	No	
§ 60.42c(h)(1)	Yes	
§ 60.42c(h)(2)-(3)	No	
§ 60.42c(i)-(j)	Yes	
§ 60.43c(a)-(b)	No	
§ 60.43c(c)-(d)	Yes	
§ 60.44c(a)-(g)	No	
§ 60.44c(h)	Yes	
§ 60.44c(i)-(j)	No	
§ 60.45c(a)(1)-(6)	No	
§ 60.45c(a)(7)	Yes	
§ 60.45c(b)	No	
§ 60.46c(a)-(d)	No	
§ 60.46c(e)	Yes	
§ 60.46c(f)	No	
§ 60.47c(a)-(b)	No	
§ 60.48c(a)-(b)	Yes	
§ 60.48c(c)	No	
§ 60.48c(d)	Yes	
§ 60.48c(e)(1)-(2)	Yes	
§ 60.48c(e)(3)-(10)	No	
§ 60.48c(e)(11)	Yes	
§ 60.48c(f)(1)	Yes	
§ 60.48c(f)(2)-(3)	No	
§ 60.48c(g)	Yes	
§ 60.48c(h)	No	
§ 60.48c(i)	Yes	

Table 1. 40 CFR 60, Subpart Dc applicability to Baxter Healthcare Corporation

Route To: FELICIA INMAN Administration

### **AIR DIVISION**

### **INVOICE REQUEST FORM**

(9-96)

**Facility Name & Address:** Baxter Healthcare Corporation 1900 N. Hwy. 201 Mountain Home, AR 72653

**CSN**: 03-0002 **Permit No**: 544-AOP-R0

**Permit Description**: T5

(e.g. A = AIR CODE, S=SIP, H=NESHAP, P=PSD, N=NSPS, T5= Title V)

## **Initial Fee Calculations:**

**Title V** = ' (17.39)(TPY each pollutant, except CO) - amount of last annual air permit fee

NOTE: Do Not double count HAPs and VOCs!!! No greater than 4000 tpy per pollutant or less than \$1000

**Title V** = ' (17.39)(21.4+44.9+215.2+83.7+0.13+22.5+0.44+0.05) - \$3,097.00 = \$3,655.88

**Fee Amount**: \$3,656.00

**Engineer**: Vladimir Korolev **Date:** July 11, 1997

#### Public Notice

Pursuant to the Arkansas Operating Air Permit Program (Regulation #26) Section 6(b), the Air Division of the Arkansas Department of Pollution Control and Ecology gives the following notice:

Baxter Healthcare Corporation owns and operates a facility in Mountain Home, Arkansas, Baxter County. The facility manufactures items used in the healthcare field. This will be facility's first permit under the Arkansas Air Operating Permit Program. The permit will reflect the installation of a catalytic oxidizer to reduce ethylene oxide emissions, construction of a new boiler, construction of a new pellet treatment oven, updated allowable emission rates of sulfur dioxide, carbon monoxide, nitrogen oxides, and volatile organic compounds, including estimated reduction of the emission rates of hazardous air pollutants.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice.

Citizens wishing to examine the permit application and staff findings and recommendations may do so by contacting Ronda Sharp. Citizens desiring technical information concerning the application or permit should contact Vladimir Korolev. Both Ronda Sharp and Vladimir Korolev can be reached at the Department's central office, 8001 National Drive, Little Rock, Arkansas 72209, (501) 682-0744.

Copies of the draft permit and permit application have been placed at the Baxter County Public Library, 424 West Seventh Street, Mountain Home, Arkansas 72653. This information may be reviewed during the Department's normal business hours.

Interested or affected persons may also submit written comments on the proposal to the Department at the above address - Attention: Ronda Sharp. In order to be considered, the comments must be submitted within thirty (30) days of publication of this notice. Although the Department is not proposing to conduct a public hearing, one will be scheduled if significant comments on the permit provisions are received. If a hearing is scheduled, adequate public notice will be given in the newspaper of largest circulation in the county in which the facility in question is, or will be, located.

The Director shall make a final decision to issue or deny this application or to impose special conditions in accordance with Part II of the Arkansas Pollution Control and Ecology Commission's Administrative Procedures (Regulation #8).

Dated this

Randall Mathis Director