

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0544-AR-15 AFIN: 03-00002

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Baxter Healthcare Corporation
1900 North Highway 201
Mountain Home, Arkansas 72653

3. PERMIT WRITER:

Andrea Sandage

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Unlaminated Plastics Film and Sheet (except Packaging)
Manufacturing
NAICS Code: 326113

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
8/27/2018	Administrative Amendment	Addition of IA that are vented outside.

6. REVIEWER'S NOTES:

Baxter Healthcare Corporation (Baxter) owns and operates a manufacturing facility located in Mountain Home, Arkansas. The facility manufactures peritoneal dialysis disposables, blood cell separation disposables, patient connectors, and produces plastics for the disposables manufacturing. This administrative amendment is necessary to add the following sources to the list of Insignificant Activities (A-13) because these sources are now vented outside. There are no changes in permitted emissions.

- Tubing Vacuum Pump 1
- Tubing Vacuum Pump 2
- Tubing Vacuum Pump 3
- Blender 50 Drop Scale Vacuum Pump (1)
- Blender 50 Drop Scale Vacuum Pump (2)
- Blender 51 Drop Scale Vacuum Pump
- Blender 52 Drop Scale Vacuum Pump
- Blender 53 Drop Scale Vacuum Pump
- Regrind Silo Penthouse Heat Removal Blower
- Blender 50 Resin Vacuum Pump
- Blender 50 Regrind Vacuum Pump
- Silo 1 Blend Convey to Hopper
- Regrind Vacuum Convey from C Grinder
- Regrind Vacuum Convey from Inspection Pass 2
- Pelletizer 46 Pellet Convey Receiver 1
- Pelletizer 46 Pellet Convey Receiver 2
- Pelletizer 46 Pellet Convey Receiver 3
- Pelletizer 46 Pellet Convey Receiver 4
- Pelletizer 46 Pellet Convey Receiver 5
- Blend Transfer from Silo 3 to Silo 5
- Blend Convey Vacuum Pump (1)
- Blend Convey Vacuum Pump (2)
- Central Vacuum System Blower
- Blender 60 Resin Vacuum Pump
- Bender 60 Regrind Vacuum Pump

The following A-13 sources were added in Permit 0544-AR-12 (March 9, 2015) but were not added to the Insignificant Activity list. This is a clerical correction.

- Tubing Lines
- New Blown Film Extrusion Operation
- Automated Assembly Lines (PVC File Extrusion, Titan, DaVinci)

COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

The facility was last inspected May 24, 2018. There were no areas of concern noted at the time.

7. PSD/GHG APPLICABILITY:

- a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N

b) Is the facility categorized as a major source for PSD? N

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

8. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
11-15, 57, 76-83, 88, 94, 101, 116-119	Ethylene Oxide	40 CFR Part 63, Subpart A and Subpart O
18	N/A	40 CFR Part 60 Subpart Dc
112	HAPs	40 CFR Part 63 Subpart ZZZZ
112	HC, NO _x , CO & PM	40 CFR Part 60 Subpart IIII

9. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

10. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the ADEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

Based on Department procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

c) H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards Y

If exempt, explain: No H₂S emissions

11. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
09	Testing & Records	60% IPA density 6.63 lb/gal 99% waste	N/A	N/A	usage - waste = total emissions
17, 18	AP-42 Table 1.4-1,2,3	<u>lb/MMscf</u> PM = 5.7 PM ₁₀ = 1.9 NO _x = 100 CO = 84 VOC = 5.5 SO ₂ = 0.6	N/A	N/A	
41	Records	2% of Grinder Feed goes to B.H. Max Feed 8000tpy	Baghouse	99%	Max equipment capacity
72	Testing	Area = 0.05 ft ² Velocity = 250 fpm	N/A	N/A	
78-83, & 101	Testing & Records	Potential: 2% Chamber Exhaust	Scrubber	99.8%	Max sent to scrubber = 421 lb/hr EtO
76, 77, & 94	Testing & Records	Potential: 15% Aeration Room	Catalytic Oxidizer	99%	
88	TANKS	2 tank turnovers /month 24 t.t./yr 8,000 gal tank	N/A	N/A	Assumed 100% ethylene glycol
89&90	TANKS	Tank ht = 24 ft Tank D= 11.7ft 19304 gal 247 t.t./yr	N/A	N/A	
95	TANKS	Tank ht = 5 ft Tank D= 5ft 734 gal 1280 t.t./yr	N/A	N/A	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
95	Mass Balance	Tubing/pelletizing: 11 tubing lines 2 pelletizers 1" D max 7" max distance Film Lines: 42" cool film 64" wide 11 lines	Hood	T/P: 80% Film: 98%	
97	Mass Balance	Max Usage: 100 lb/hr VOC	N/A	N/A	
100	TANKS	15 t.t./yr tank D = 10'6" tank ht. = 39'	N/A	N/A	
108	Mass Balance	15 gal/yr Ink density = 9 lb/gal 2% Dibutyl phthalate 200 lb/yr MeCl	N/A	N/A	
112	Kohler Power Systems Emission Data Sheet & AP 42	0.1290 g/kWh PM 0.0022 lb/hp-hr PM ₁₀ 0.0021 lb/hp-hr SO _x 0.1400 g/kWh VOC 2.9500 g/kWh NO _x 0.1100 g/kWh CO	N/A	N/A	237 HP 177 kW
113	Tanks 4.0.9d	N/A	N/A	N/A	583 gallon tank Diesel Fuel
116 117	AP-42 Table 1.4-1,-2	<u>lb/MMscf</u> PM = 5.7 PM10 = 1.9 NO _x = 100 CO = 84 VOC = 5.5 SO ₂ = 0.6	Catalytic Oxidizer	Controlled to 1 ppm	
118	Subpart O	<u>Volumetric Flow</u> 29,217 acfm	Catalytic Oxidizer	99%	
119	Subpart O	<u>200,000 lb/yr</u>	Acid-Water Scrubber	99%	

12. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
N/A				

13. MONITORING OR CEMS:

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

SN	Parameter or Pollutant to be Monitored	Method (CEM, Pressure Gauge, etc.)	Frequency	Report (Y/N)
94	Oxidation Temperature	Temperature monitor	continuously	N

14. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
11-15, 57	Ethylene Oxide usage	600,000 lb/yr	monthly	N
94	oxidation temperature	minimum of 10°F below baseline temperature	hourly avg. & 3-hr avg.	N
	actions taken during start-up, shut-down, or mal-function	as necessary	as necessary & semiannual	Y
17, 18	natural gas usage	570 MM ft ³ /rolling twelve-month period	monthly	N
	No.2 fuel oil usage	725,000 gal/rolling twelve-month period	monthly	N
41	amount of waste	8,000 tons/yr	monthly	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	plastic ground			
	Preventive maintenance	N/A	every 3 months	N
97	VOC usage Updated list of sources Updated plot plan Raw materials used Updated MSDSs	100 lb/hr, 95 tpy	Monthly	N
101	Liquid level in scrubber liquor tank	18 feet, maximum	weekly	N
109	Single HAP usage Combined HAP Updated list of sources Updated plot plan Raw materials used Updated MSDSs	9.5tpy 23.75 tpy	Monthly	N
112	Hours & Reason for Operation	Total: 500 hr/yr Maintenance Checks and testing: 100 hr/yr Non-emergency situations: 50 hr/yr (included in 100 hr/yr limit) Peak shaving/income generation not allowed	As operated	N
112	Purchased fuel	requirements of	As Purchased	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	specifications	40 CFR 80.510 for nonroad diesel fuel		
112	Manufacturer's emission-related specifications and engine certification	N/A	N/A	N
112	Maintenance and Repair	As per manufacturer instructions	N/A	N
112	Maintenance Plan & Testing Results	N/A	N/A	Y

15. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
17, 18	5% (Natural Gas)	§18.501	Opacity Reading
17, 18	20% (No. 2 Fuel Oil)	§18.501	Opacity Reading
41	5%	§18.501	Preventative maintenance
94	20%	§19.503	Daily Observations
112	20%	§19.503	Daily Observations when Operating
118, 119	20%	§19.503	Daily Observations

16. DELETED CONDITIONS:

Former SC	Justification for removal
	None

17. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Chiller #1-3(former SN-67) #1 replaced in 2008 (no emissions)	A-1			0.008				
Chiller #5 (former SN-68)	A-1			0.003				
Chiller #4	A-1			None				
Chiller Plant #3 (installed 2007)	A-1			None				
Chiller Plant	A-1			None				
NG Hot Water Heater	A-1	0.01	5.13E-04	4.7E-02	0.07	0.09	4.27E-07	4.27E-07
Portable Transfer Tank of Emergency Generator	A-2			0.00001				
Resin Storage Silo 3A (former SN-59)	A-13	0.0023						
Resin Storage Silo 4A (former SN-60)	A-13	0.0023						
Resin Storage Silo 4B (former SN-61)	A-13	0.0023						
Resin Storage Silo 5 (former SN-62)	A-13	0.0023						
Resin Storage Silo 3B (former SN-63)	A-13	0.0023						
Resin Storage Silo 3C (former SN-64)	A-13	0.0023						
Resin Storage Silo (former SN-65)	A-13	0.0023						
Resin Storage Silo (former SN-66)	A-13	0.0023						
Vacuum Pumps Plastics (2) (99.9% eff)	A-13	<.01						
Dust Collector Home Choice	A-13	<.01						

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Molding Process (SN-96)	A-13						<.1	<.1
Coextruded Non-PVC Plastics (SN-107)	A-13			<0.1				
PM Removal Vacuum Systems	A-13	<0.1						
Thermoformer regrind convey air	A-13	<0.1						
Core Extrusion convey air	A-13	<0.1						
Non-146-2 Grinder (filter air and exhaust back into warehouse – no exhaust to atmosphere)	A-13	<0.1						
PVC Blend (4 inside tanks– fugitive)	A-13	<0.1						
1847 Blend (1 inside tank- fugitive)	A-13	<0.1						
146-2 Pellets(2 inside tanks- fugitive)	A-13	<0.1						
Print Shop (SN-85)	A-13						0.001	0.001
Pump Housing (Sets) (SN-108)	A-13						0.5	0.5
Label Printing Inks	A-13						0.3	0.33
Two Tubing Lines	A-13			0.09				
New Blown Film Extrusion Operation	A-13			0.09				
PVC Film Extrusion Capacity	A-13			0.19				
Titan & Da Vinci	A-13			0.56				
Tubing Vacuum Pump	A-13	1.99E-04						

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Tubing Line	A-13	0.31						
Tubing Vacuum Pump 1	A-13	0.17						
Tubing Vacuum Pump 2	A-13	0.17						
Tubing Vacuum Pump 3	A-13	0.17						
Blender 50 Drop Scale Vacuum Pump (1)	A-13	0.23						
Blender 50 Drop Scale Vacuum Pump (2)	A-13	0.23						
Blender 51 Drop Scale Vacuum Pump	A-13	0.17						
Blender 52 Drop Scale Vacuum Pump	A-13	0.17						
Blender 53 Drop Scale Vacuum Pump	A-13	0.17						
Regrind Silo Penthouse Heat Removal Blower	A-13	0.05						
Blender 50 Resin Vacuum Pump	A-13	0.12						
Blender 50 Regrind Vacuum Pump	A-13	0.07						
Silo 1 Blend Convey to Hopper	A-13	0.09						
Regrind Vacuum Convey from C Grinder	A-13	0.14						
Regrind Vacuum Convey from Inspection Pass 2	A-13	0.04						
Pelletizer 46 Pellet Convey Receiver 1	A-13	0.03						
Pelletizer 46 Pellet Convey Receiver 2	A-13	0.02						
Pelletizer 46 Pellet Convey Receiver 3	A-13	0.02						
Pelletizer 46 Pellet Convey Receiver 4	A-13	0.02						
Pelletizer 46 Pellet Convey Receiver 5	A-13	0.02						

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Blend Transfer from Silo 3 to Silo 5	A-13	0.17						
Blend Convey Vacuum Pump (1)	A-13	0.39						
Blend Convey Vacuum Pump (2)	A-13	0.39						
Central Vacuum System Blower	A-13	0.15						
Blender 60 Resin Vacuum Pump	A-13	0.21						
Bender 60 Re grind Vacuum Pump	A-13	0.13						
Sum for A-13	A-13	4.57		1.03			0.91	0.94
570 gal Diesel Fuel tank (Mfg. After July 1, 2008) (New Area Source MACT does not apply)	A-3			0.0001				
300 gal Diesel Fuel tank (Mfg. After July 1, 2008) (New Area Source MACT does not apply)	A-3			<0.0001				
500 & 300 gal Propane tanks	A-3			<0.0001				
Distilled Water Tank	A-3			NA			NA	NA
De-aeration tank	A-3			NA			NA	NA
5,500 gal Out of Service Tank	A-3			NA			NA	NA
Water	A-3			NA			NA	NA
Air Receiver Tank	A-3			NA			NA	NA

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Note: Not all IA that are included in the permit from previous revisions are included in this table. These sources were not updated by this revision.

18. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

List all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
0544-AR-14

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-16

Baxter Healthcare Corporation

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AFIN: 03-00002

			Old Permit		New Permit
\$/ton factor	23.93	Permit Predominant Air Contaminant	94.5		94.5
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	0		
Minimum Initial Fee \$	500				
		Permit Fee \$	0		
Check if Administrative Amendment <input checked="" type="checkbox"/>		Annual Chargeable Emissions (tpy)	94.5		

Pollutant (tpy)	Old Permit	New Permit	Change
PM	3.7	3.7	0
PM ₁₀	2.6	2.6	0
PM _{2.5}	0	0	0
SO ₂	0.7	0.7	0
VOC	94.5	94.5	0
CO	26.3	26.3	0
NO _x	31.5	31.5	0
Ethylene Oxide	5.5	5.5	0
Ethylene Glycol	0.05	0.05	0
Single HAP	9.5	9.5	0
Total HAP	23.75	23.75	0