

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1960-AR-8 AFIN: 60-00308

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Baptist Health - Baptist Health Medical Center - Little Rock
9601 Baptist Health Drive
Little Rock, Arkansas 72205

3. PERMIT WRITER:

Derrick Brown

4. NAICS DESCRIPTION AND CODE:

NAICS Description: General Medical and Surgical Hospitals
NAICS Code: 622110

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
10/20/2025	De Minimis	Replace SN-05 Main Cooling Towers (A/B/C/D/E) with SN-05 Cooling Tower (4 Towers).

6. REVIEWER'S NOTES:

Baptist Health medical Center (BHMC) operates a General Medical and Surgical Hospital in Little Rock, Arkansas. This modification replaces the facility's SN-05 Main Cooling Towers (A/B/C/D/E) with SN-05 Cooling Tower (4 Towers). This De Minimis change decreases facility PM₁₀ emissions by 33.6 tpy, and PM emissions by 33.6 tpy.

7. COMPLIANCE STATUS:

The most recent inspection report for June 24, 2025, for this facility stated the facility had areas of concern regarding General Conditions 3 and 16.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N
If yes, were GHG emission increases significant? N/A

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*

If yes for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
12, 13, and 14	SO ₂	NSPS 40 CFR Part 60 Subpart Dc
07-10, 16	HAPs	NESHAP 40 CFR Part 60 Subpart ZZZZ
07-10, 16	PM, CO, NO _x , HC	NSPS 40 CFR Part 60 Subpart IIII

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
N/A				

11. PERMIT SHIELD – TITLE V PERMITS ONLY: N/A

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:
N/A

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. 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 DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

Based on Division of Environmental Quality procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern for this modification.

c) H₂S Modeling: N/A

15. CALCULATIONS:

SN	Emission Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
03, 04, 12, 13, 14	AP-42 1.4	<u>lb/MMscf</u> PM ₁₀ = 7.6 SO ₂ =0.6 NO _x = 100 CO=84 VOC= 5.5 <u>Lb/10⁶ scf</u> Benzene= 2.1 E-3 Fluoranthene= 3.0 E-6	None	N/A	<u>Natural Gas</u> SN-03&- 4=3MMBtu SN-12-14= 24.2 MMBtu 400 MMscf/yr
03, 04, 12, 13, 14	AP-42 1.3	<u>Lb/10³ gal</u> PM= 3.3 PM ₁₀ = 1.3 SO ₂ = 42.6 NO _x = 20 CO= 5.0 VOC= 0.556 <u>Lb/10³ gal</u> Benzene= 2.14 E-4 Fluoranthene= 4.84 E-6	None	N/A	<u>Fuel Oil</u> SN-03&04=3.19 MMBtu SN-12-14= 20.5 MMBtu SN-03&04=22.8 gal/hr SN-12-14= 146.5 gal/hr 175,000 gallons/yr
05	AP-42 13.4	0.019 lb/10 ³ gal	None	N/A	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
06	AP-42 Table 13.4-1	$(1,100 \text{ gpm}) \times (60 \text{ min/hr}) \times (1.7 \text{ lb/1000 gal}) \times (0.003) = 0.34 \text{ lb/hr}$	None	N/A	
07, 08, 09, 10, 16	AP-42 3.4-1 MFG Data AP-42 3.4-3 AP-42 3.4-4	<u>Lb/MMBtu</u> $\text{SO}_2 = 1.52 \text{ E-5}$ <u>Lb/hr</u> $\text{PM/PM}_{10} = 0.52$ $\text{NO}_x = 64.02$ $\text{CO} = 2.30$ $\text{VOC} = 0.156$ <u>Lb/MMBtu</u> $\text{Benzene} = 7.76 \text{ E-4}$ $\text{Fluoranthene} = 4.03 \text{ E-6}$	None	N/A	Displacement= 4.3 liters per cylinder Diesel Fuel

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
N/A				

17. 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)
N/A				

18. 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)
03, 04, 12, 13, 14	Natural Gas	400 MMscf/yr	Monthly	N
03, 04, 12, 13, 14	Fuel oil #2/diesel Sulfur Content	175,000 gallon per year 0.3 wt. %	Daily	N
03, 04, 12, 13, 14	Diesel Fuel Usage	Can used only be used during periods of gas curtailment, gas supply interruption, startups, or periodic testing (not to exceed 48 hours per year) on liquid fuel.	Monthly	N
03, 04, 12, 13, 14, 16	Fuel Oil #2/diesel Certification	N/A	N/A	N
07, 08, 09, 10,	Hours of Operation Sulfur Content	Total= 2,320 per year 15 ppm	Monthly	N
16	Hours of Operation	580 hours/consecutive 12 months	Monthly	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
03-04, 12-14 (Natural Gas)	5%	§18.501	Inspector's Observation
03-04, 12-14 (Distillate Fuel)	20%	§19.503 and 40 CFR 60.43c (c)	Inspector's Observation
07-10, 16 (Distillate Fuel)	20%	§19.503 and A.C.A. §8-4-203 as referenced by	Inspector's Observation

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SN	Opacity	Justification for limit	Compliance Mechanism
		§8-4-304 and §8-4-311	

20. DELETED CONDITIONS:

Former SC	Justification for removal
No conditions deleted with this modification.	

21. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Eye Center Diesel Storage Tank at Boilers (75 gal)	A-3			8.02 E-5				
Eye Center Diesel Storage Tank at Generator (25 gal)	A-3			7.15 E-5				
Diesel Powerhouse ASTs #1 (10,000 gal)	A-3			4.27 E-3				
Diesel Powerhouse ASTs #2 (10,000 gal)	A-3			4.27 E-3				
Diesel Generator Day Tank #1 (400 gal)	A-3			1.79 E-4				
Diesel Generator Day Tank	A-3			1.79 E-4				

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
#2 (400 gal)								
Diesel Generator Day Tank #3 (400 gal)	A-3			1.79 E-4				
Diesel Generator Day Tank #4 (400 gal)	A-3			1.79 E-4				
Lift Station Generator Tank (125 gal)	A-3			7.52 E-5				
Hydraulic Oil Tank – MRI Elevator (450 gal) (No. 6 Fuel)	A-3			1.85 E-6				
Hydraulic Oil Tank – Service Elevator (450 gal) (No. 6 Fuel)	A-3			1.85 E-6				
A-3 TOTAL	A-3			9.48 E-3				
Hospital-wide Lab Material Usage	A-5			2.73			0.69	0.69
Eye Care Center- CI Emergency Generator (350 kW) (Installed 1996)	A-13	0.6	0.3	0.3	0.8	3.6	0.17	0.08

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Lift Station- CI Emergency Generator (50 kW) (Installed 2002)	A-13	0.01	0.06	0.01	0.05	0.22	<0.01	<0.01
Diesel Fuel Storage Tanks (15,000 gallon)	A-13			1.89E-3				
Jet Fuel Storage Tank (10,000 gallon)	A-13			1.63E-3				
A-13 TOTAL	A-13	0.61	0.36	0.32	0.85	3.82	0.21	<0.24

22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
1960-AR-7

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-16

Facility Name: Baptist Health Medical
Center (Little Rock)
Permit Number: 1960-AR-8
AFIN: 60-00308

			Old Permit	New Permit
\$/ton factor	28.14	Permit Predominant Air Contaminant	97.4	97.4
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	0	
Minimum Initial Fee \$	500			
		Permit Fee \$	400	
Check if Administrative Amendment	☐	Annual Chargeable Emissions (tpy)	97.4	

Pollutant (tpy)	Old Permit	New Permit	Change
PM	42.5	8.9	-33.6
PM ₁₀	42.3	8.7	-33.6
PM _{2.5}	0	0	0
SO ₂	4.1	4.1	0
VOC	3.5	3.5	0
CO	26.8	26.8	0
NO _x	97.4	97.4	0
Benzene	0.04	0.04	0
Fluoranthene	0.03	0.03	0