

ADEQ MINOR SOURCE AIR PERMIT

Permit #: 1923-A

IS ISSUED TO:

Arkansas Children's Hospital
800 Marshall Street
Little Rock, AR 72202
Pulaski County
CSN: 60-0689

THIS PERMIT IS YOUR AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND YOUR APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 ET SEQ.) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Keith A. Michaels

Date Issued

SECTION I: FACILITY INFORMATION

PERMITTEE: Arkansas Children's Hospital
CSN: 60-0689
PERMIT NUMBER: 1923-A

FACILITY ADDRESS: 800 Marshall Street
Little Rock, AR 72202

COUNTY: Pulaski

CONTACT POSITION: Richard James
TELEPHONE NUMBER: (501) 320-3801

REVIEWING ENGINEER: Bryan Leamons

UTM North-South (X): 3844.6
UTM East-West (Y): 564.8
Zone: 15

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SECTION II: INTRODUCTION

Summary

Arkansas Children's Hospital (ACH) operates a pathological waste incinerator at 800 Marshall Street in Little Rock. The incinerator has previously been permitted to only process pathological wastes with a limited maximum plastic content. Previously, compliance with the plastic limit has been shown with annual surveys of the waste stream. Due to the difficulties and hazards of monitoring the pathological waste stream, ACH has requested to discontinue surveys of incinerator charges. Plastic limits and plastic survey requirements are removed in this permit. The plastic content limit is unnecessary because the starved-air incinerator design effectively limits the amount of plastic that can be consumed by the incinerator and control equipment.

This permitting action also serves to eliminate the requirement to monitor CO concentrations in the incinerator exhaust. The CO monitoring has been shown to be an unnecessary parameter which was initially used to demonstrate proper combustion and compliance with the PM limit. Stack tests that were completed in February of 2000 have shown particulate concentrations at levels less than a one- tenth of permitted PM levels. This, along with compliance with the minimum secondary chamber temperature of 1800° F and proper operation of control equipment should be representative of proper operation and compliance with the PM limit.

The predominant pollutant at the facility is NO_x which is emitted at a rate of 90.3 TPY.

Process Description

Pathological Waste Incinerator (SN-01)

Arkansas Children's Hospital is a non profit medical and research center. Being a large medical facility, ACH generates a considerable amount of hospital and medical wastes. Wastes are incinerated in a Conumat Model CS-325-2 pathological waste incinerator. The incinerator is capable of processing 1000 lbs/hr of pathogenic, general housekeeping, or a combination of the two types of wastes. The incinerator primary chamber operates at a heat input rate of 1 MMBTU/hr and temperatures between 1400E and 1600E F. The secondary chamber operates at a heat input rate of 4 MMBTU/hr and temperatures of at least 1800E F. Pipeline quality natural gas fuels both chambers.

Incinerator effluent is processed by a series of control devices. First, the gasses are cooled from near 2000E F to near 400E in a spray tower. Here, activated carbon and lime slurry are added to the stream. The lime serves to neutralize the acid gasses (HCl and SO₂) to form calcium salts. The carbon injection serves to adsorb dioxin and furan combustion products. The effluent gasses next flow through a demister to remove excess moisture. The gasses then flow to the cyclone

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where calcium salts and other particulates are separated from the stream. Particles are further removed by a baghouse before the stream finally flows through a packed tower scrubber. An alkaline scrubbing liquor is employed to neutralize any remaining acids and pick up remaining particulates. The effluent stream exits through vent stack SN-01.

Steam Boilers (SN-02 through SN-04)

ACH operates 5 steam boilers for the purpose of atmospheric heat and humidity control.

- Steam boilers No. 1 and 3 are 500 BHP Kewanee Firetube Steam Boilers. (SN-03)
- Boiler No. 2 is a 250 BHP Kewanee Firetube Boiler. (SN-03)
- Boiler No. 4 is a 250 BHP Kewanee Firetube Boiler. (SN-02)
- A 750 BHP Kewanee Firetube Steam Boiler is located at the Energy Building. (SN-04)

Each boiler is permitted for unlimited operation with natural gas and a limited amount of No. 2 distillate oil may be used per consecutive 12 months for emergency purposes and equipment testing only. Emergency fuel is stored in a 10,152 gallon underground storage tank, any of three above ground 8,000 gallon storage tanks, or any of various smaller day tanks.

Turbine Engines (SN-05 and SN-06)

ACH has two Detroit Allison Model ASP 729 Gas Turbine Engines used for emergency electrical power generation only. The engines use No. 2 distillate oil and are capable of producing 2500 kW-hr and 3100 kW-hr. They vent through SN-05 and SN-06 respectively. The turbines are run several times per year for equipment checks. Fuel is stored in a 10,152 gallon underground storage tank, any of three above ground 8,000 gallon storage tanks, or any of various smaller day tanks.

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Other Emergency Generators (SN-07 through SN-13)

ACH has four Caterpillar 375 horsepower diesel engine powered generators on site for emergency power supply. Each set can produce 250 kW-hr of power. Each engine is tested monthly for proper operation. Each engine exhausts separately from SN-07, SN-08, SN-09, and SN-10.

A 227 horsepower Caterpillar diesel powered generator is used for an emergency power supply of 150 kW-hr. The generator is tested monthly for proper operation. Exhaust occurs through stack SN-11.

An 88 horsepower Cummins-Onan emergency generator is located at the energy building. This diesel engine and generator can produce 62.5 kW-hr. The engine is tested monthly and only run in emergency situations. The engine exhausts through stack SN-12.

At ACH Research Institute (ACHRI) a Waukesha generator is used for emergencies only. The engine and load unit can supply 155 kW-hr of power. The engine is run monthly for testing. The engine exhausts through stack SN-13.

Generator engine fuel is stored in a 10,152 gallon underground storage tank, any of three above ground 8,000 gallon storage tanks, or any of various smaller day tanks.

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Regulations

This facility is subject to regulation under the *Arkansas Air Pollution Control Code (Regulation 18)*, the *Arkansas Plan of Implementation for Air Pollution Control (Regulation 19)*, and the *New Source Performance Standards (NSPS)*, 40 CFR 60, Subparts Dc, and GG.

A state or federal plan of implementation that regulates performance standards of hospital/ medical/ infectious waste incinerators will take effect in upcoming months. The plan guidelines are outlined in the *New Source Performance Standards (NSPS)*, 40 CFR 60, Subpart Ce which references Subpart Ec of the same part. Current process information suggests that this facility will be subject to regulation by the forthcoming plan. If applicable, ACH will be required to submit an application for permit modification that proposes conformity with the plan. More stringent emission limits, additional testing, and other requirements may be imposed.

The following table is a summary of the facility's total emissions.

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	14.5	9.8
PM ₁₀	14.5	9.8
SO ₂	49.4	4.0
VOC	7.4	5.0
CO	26.7	41.9
NO _x	151.8	90.3
Lead	0.1	0.1
HCl	0.1	0.2
Cadmium	<0.1	0.1
Mercury	<0.1	0.1

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SECTION III: PERMIT HISTORY

Permit #395-I, issued on July 16, 1985, allowed ACH to operate a medical incinerator.

Permit #395-IR-1, issued on June 1, 1995, permitted the equipment change to a new incinerator.

On September 10, 1998, a CAO was issued to ACH due to deficiencies in records and permit violations. The CAO required ACH to submit a new application that included provisions for monitoring, protocols for continuous emissions monitors, and details pertaining to other previously unpermitted emission sources.

Permit #395-IR-2, issued on November 16, 1999, incorporated all emission points located at the facility, and provided additional emission rates, compliance methods, and specific protocols for proper incinerator operation. The permit issuance served to finalize actions from the previous CAO.

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SECTION IV: EMISSION UNIT INFORMATION

Specific Conditions

- Pursuant to §19.501 et seq of the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control*, effective February 15, 1999 (Regulation 19) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	tpy
01	Medical Waste Incinerator	PM ₁₀	3.1	5.9
		SO ₂	0.1	0.1
		VOC	0.2	0.1
		CO	2.1	6.5
		NO _x	3.0	7.8
		Lead	0.1	0.1
02	Steam Boiler #4 (Natural Gas)	PM ₁₀	0.1	0.3
		SO ₂	0.1	0.1
		VOC	0.1	0.2
		CO	0.7	3.1
		NO _x	0.8	3.7
03	Steam Boilers #1,2, & 3 Combined (Natural Gas)	PM ₁₀	0.3	1.4
		SO ₂	0.1	0.1
		VOC	0.2	1.0
		CO	3.5	15.4
		NO _x	4.2	18.3
04	750 BHP Steam Boiler (Natural Gas)	PM ₁₀	0.2	0.8
		SO ₂	0.1	0.1
		VOC	0.1	0.6
		CO	2.1	9.2
		NO _x	2.5	11.0
02	Steam Boiler #4 (No. 2 Fuel Oil)	PM ₁₀	0.1	PM ₁₀ 0.1
		SO ₂	0.2	
		VOC	0.1	
		CO	0.1	
		NO _x	0.1	
	Steam Boilers	PM ₁₀	0.1	

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SN	Description	Pollutant	lb/hr	tpy	
03	#1,2, & 3 Combined (No. 2 Fuel Oil)	SO ₂	0.2	SO ₂	1.4
		VOC	0.1	VOC	0.1
		CO	0.1	CO	0.2
		NO _x	0.1	NO _x	0.6
04	750 BHP Steam Boiler (No. 2 Fuel Oil)	PM ₁₀	0.1		
		SO ₂	0.1		
		VOC	0.1		
		CO	0.1		
		NO _x	0.1		
05	Detroit-Allison Gas Turbine #1 (No. 2 Fuel Oil)	PM ₁₀	3.5	PM ₁₀	0.2
		SO ₂	22.7		
		VOC	1.0		
		CO	2.7		
		NO _x	39.6		
06	Detroit-Allison Gas Turbine #2 (No. 2 Fuel Oil)	PM ₁₀	3.5	CO	0.2
		SO ₂	22.7		
		VOC	1.0		
		CO	2.7		
		NO _x	39.6		
07	250 KW Caterpillar Generator #1 (No. 2 Fuel Oil)	PM ₁₀	0.8		
		SO ₂	0.7		
		VOC	0.9		
		CO	2.4		
		NO _x	11.3		
08	250 KW Caterpillar Generator #2 (No. 2 Fuel Oil)	PM ₁₀	0.8		
		SO ₂	0.7		
		VOC	0.9		
		CO	2.4		
		NO _x	11.3		
09	250 KW Caterpillar Generator #3 (No. 2 Fuel Oil)	PM ₁₀	0.8	PM ₁₀	1.1
		SO ₂	0.7		
		VOC	0.9		
		CO	2.4		
		NO _x	11.3		
	250 KW Caterpillar	PM ₁₀	0.8	SO ₂	1.0
				VOC	1.3
				CO	3.4

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SN	Description	Pollutant	lb/hr	tpy
10	Generator #4 (No. 2 Fuel Oil)	SO ₂	0.7	NO _x 15.8
		VOC	0.9	
		CO	2.4	
		NO _x	11.3	
11	150 KW Caterpillar Generator (No. 2 Fuel Oil)	PM ₁₀	0.5	
		SO ₂	0.5	
		VOC	0.6	
		CO	1.6	
		NO _x	7.5	
12	62.5 KW Cummins- Onan Emergency Generator (No. 2 Fuel Oil)	PM ₁₀	0.2	
		SO ₂	0.2	
		VOC	0.2	
		CO	0.5	
		NO _x	2.5	
13	155 KW Waukesha Emergency Power Generator (Natural Gas)	VOC	0.4	1.7
		CO	0.9	4.0
		NO _x	7.0	30.6

2. Pursuant to §18.801 of the *Arkansas Air Pollution Control Code*, effective February 15, 1999 (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table.

SN	Description	Pollutant	lb/hr	tpy
01	Medical Waste Incinerator	PM	3.1	5.9
		HCl	0.1	0.2
		Cadmium Compounds	<0.1	0.1
		Mercury Compounds	<0.1	0.1
02	Steam Boiler #4 (Natural Gas)	PM	0.1	0.3
03	Steam Boilers #1,2, & 3 Combined	PM	0.3	1.4

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SN	Description	Pollutant	lb/hr	tpy
	(Natural Gas)			
04	750 BHP Steam Boiler (Natural Gas)	PM	0.2	0.8
02	Steam Boiler #4 (No. 2 Fuel Oil)	PM	0.1	PM 0.1
03	Steam Boilers #1,2, & 3 Combined (No. 2 Fuel Oil)	PM	0.1	
04	750 BHP Steam Boiler (No. 2 Fuel Oil)	PM	0.1	
05	Detroit-Allison Gas Turbine #1 (No. 2 Fuel Oil)	PM	3.5	
06	Detroit-Allison Gas Turbine #2 (No. 2 Fuel Oil)	PM	3.5	PM 0.2
07	250 KW Caterpillar Generator #1 (No. 2 Fuel Oil)	PM	0.8	PM 1.1
08	250 KW Caterpillar Generator #2 (No. 2 Fuel Oil)	PM	0.8	
09	250 KW Caterpillar Generator #3 (No. 2 Fuel Oil)	PM	0.8	
10	250 KW Caterpillar Generator #4 (No. 2 Fuel Oil)	PM	0.8	
11	150 KW Caterpillar Generator (No. 2 Fuel Oil)	PM	0.5	

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SN	Description	Pollutant	lb/hr	tpy
12	62.5 KW Cummins-Onan Emergency Generator (No. 2 Fuel Oil)	PM	0.2	

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3. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, visible emissions shall not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Opacity Limit (Natural Gas)	Opacity Limit (No. 2 Fuel Oil)	Regulatory Citation (Natural Gas)	Regulatory Citation (No. 2 Fuel Oil)
01	5%	N/A	§18.501	N/A
02	5%	20%	§18.501	§19.503
03	5%	20%	§18.501	§19.503
04	5%	20%	§18.501	§19.503
05	N/A	20%	N/A	§19.503
06	N/A	20%	N/A	§19.503
07	N/A	20%	N/A	§19.503
08	N/A	20%	N/A	§19.503
09	N/A	20%	N/A	§19.503
10	N/A	20%	N/A	§19.503
11	N/A	20%	N/A	§19.503
12	N/A	20%	N/A	§19.503

4. Pursuant to §18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation 18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303.
5. Pursuant to §18.901 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne.

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6. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not process more than 1000 lbs per hour of infectious ("red bag") medical wastes and non-infectious, general housekeeping wastes, Types 0 and 4 according to the Incinerator Institute of America (See Appendix A).
7. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain daily records which demonstrate compliance with Specific Condition 6. Records shall contain the weight and time of each charge and shall be updated each time the incinerator is charged. These records shall be kept on site, and shall be made available to Department personnel upon request.
8. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall operate a continuous temperature monitor at the secondary chamber. The permittee shall not allow the temperature of the secondary chamber to fall below 1800E F during any time when waste is present in the primary chamber.
9. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records that demonstrate compliance with Specific Condition 8. Records shall contain the secondary chamber time and temperature each time the incinerator is charged. These records shall be kept on site, and shall be made available to Department personnel upon request.
10. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not allow incineration of an unusually large amount of plastic during any single charge. Should the waste stream have a surge in plastic content or any other single material, the operator shall make adjustments in loading procedures to allow for an even, more regular distribution of that material.
11. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not allow any waste to be incinerated that is generated off-site.
12. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not allow a particulate rate to exceed 0.1 grains per dry standard cubic foot (corrected to 7% CO₂) from SN-01.
13. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall test SN-01 every five years for total particulate matter measured by EPA Reference method 5 or 29 in order to demonstrate compliance with Specific Condition 13. Testing shall be performed with the incinerator operating at or

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above 90% capacity. The Department shall be notified within 30 days of each test. Reports shall be submitted within 90 days of completion of each test. The report shall be submitted to the Department in accordance with General Condition 6.

14. Pursuant to §19.702 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall monitor pH and pressure differential of the packed column scrubber and pressure differential of the baghouse during the emissions testing of SN-01 required by Specific Condition 13. After testing is complete, the permittee shall operate the scrubber and baghouse within the same ranges that occurred during successful compliance testing.
15. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain hourly records of the packed column scrubber pH and pressure differential and the baghouse pressure differential in order to demonstrate compliance with Specific Condition 14. Records shall be kept on-site and shall be made available to Department personnel upon request.
16. Pursuant to §19.702 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain a copy of the manufacturer's operating manual/ instructions and a copy of this permit in the immediate vicinity of the incinerator.
17. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall dispose of the incinerator bottom ash in a manner which will comply with all applicable statutes of the Arkansas solid waste regulations.

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18. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed fuel oil limits set by the following table. The permittee shall keep records demonstrating compliance with the fuel limits. The permittee may develop correlations between engine operating hours and fuel consumption. The correlations along with records of operating hours may be used to demonstrate compliance with the fuel limits. Records shall be updated each time the units are operated using fuel oil and shall be made available to Department personnel upon request.

SN	Description	Combined No. 2 Fuel Limit (gal/yr)
02 through 04	Boilers	64,608
05 & 06	Turbines	48,000
07 through 12	Diesel Engines	50,608

19. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not consume fuel oil with a sulfur content that is in excess of limits set by the following table.

SN	Description	Sulfur Limit (weight %)
02 through 04	Boilers	0.3*
05 & 06	Turbines	0.4*
07 through 12	Diesel Engines	0.3**

* Values were used in emission calculations

** Derived from emission factor used in emission calculations. See Appendix D, "Sulfur Content"

20. Pursuant to §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall demonstrate compliance with Specific Condition 19 through fuel certifications from the supplier. Certifications shall be updated each time a No. 2 fuel storage tank is refilled. Records shall be kept on-site and made available to Department personnel upon request.

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21. Pursuant to §18.901 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not operate boilers SN-02, SN-03, and SN-04 with No. 2 fuel oil for reasons other than emergencies (i.e. failure of natural gas supply or catastrophic event). The only exception to this condition will be for periodic testing of equipment.

NSPS Requirements

22. Pursuant to §19.304 of Regulation 19 and 40 CFR 60, Subpart Dc, the permittee shall keep monthly records of the quantity of fuel consumed by SN-04. Records must contain appropriate information as required by 40 CFR 60.48 (See Appendix B).
23. Pursuant to §19.304 of Regulation 19 and 40 CFR 60, Subpart GG, the permittee shall not operate electric generators SN-05 and SN-06 for purposes other than emergencies (i.e. the local electric provider cannot supply the power demanded by ACH). The only exception to this condition will be for periodic testing of equipment. See Appendix C.
24. Pursuant to §19.304 of Regulation 19 and 40 CFR 60, Subpart GG, the permittee shall not operate turbines SN-05 and SN-06 using fuel with a sulfur content higher than 0.8% by weight. Compliance with this condition shall be demonstrated by compliance with Specific Condition 19.

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SECTION V: INSIGNIFICANT ACTIVITIES

The following types of activities or emissions are deemed insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated May 7, 1999.

Description	Category
(1) 10,152 gal No. 2 fuel oil tank	A-13
(3) 8,000 gal No. 2 fuel oil tanks	A-3
(1) 10,000 gal jet fuel tank	A-3
Day tanks associated with emergency fuel supply	A-3

SECTION VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.
3. Pursuant to §19.704 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19) and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the Department 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.
4. Pursuant to §19.410(B) of Regulation 19 and/or §18.309(B) of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, construction or modification must commence within eighteen (18) months from the date of permit issuance.
5. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, records must be kept for five years which will enable the Department to determine compliance with the terms of this permit--such as hours of operation, throughput, upset conditions, and continuous monitoring data. The records may be used, at the discretion of the Department, to determine compliance with the conditions of the permit.

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6. Pursuant to §19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any reports required by any condition contained in this permit shall be certified by a responsible official and submitted to the Department at the address below.

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

7. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source or (2) equipment already operating shall be tested according to the time frames set forth by the Department. 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.
8. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
 - a. Sampling ports adequate for applicable test methods
 - b. Safe sampling platforms
 - c. Safe access to sampling platforms
 - d. Utilities for sampling and testing equipment
9. Pursuant to §19.303 of Regulation 19 and/or §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.
10. Pursuant to §19.601 of Regulation 19 and/or §18.1101 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, if the permittee exceeds an

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Permit #: 1923-A
CSN: 60-0689

emission limit established by this permit, they shall be deemed in violation of said permit and shall be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met:

- a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and that all reasonable measures have been taken to immediately minimize or eliminate the excess emissions.
 - b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.
 - c. The permittee shall submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, it need not be submitted again.
11. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall allow representatives of the Department upon the presentation of credentials:
 - a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act
 - c. To inspect any monitoring equipment or monitoring method required in this permit
 - d. To sample any emission of pollutants
 - e. To perform an operation and maintenance inspection of the permitted source
12. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit is issued in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus.

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13. Pursuant to §19.410(A) of Regulation 19 and/or §18.309(A) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be subject to revocation or modification when, in the judgment of the Department, such revocation or modification shall become necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated thereunder.
14. Pursuant to §19.407(B) of Regulation 19 and/or §18.307(B) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit may be transferred. An applicant for a transfer shall submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. A transfer may be denied on the basis of the information revealed in the disclosure statement or other investigation or, if there is deliberate falsification or omission of relevant information.
15. Pursuant to A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit shall be available for inspection on the premises where the control apparatus is located.
16. 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.
17. Pursuant to Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit supersedes and voids all previously issued air permits for this facility.

APPENDIX A

Classifications of Wastes

CLASSIFICATIONS OF WASTES

TYPE OF WASTE	DESCRIPTION OF WASTE
0 - Trash	A mixture of highly combustible waste, primarily paper, wood boxes, and combustible floor sweepings
1 - Rubbish	A mixture of combustible waste such as paper, cardboard, wood scrap, foliage, floor sweepings, and up to 20% cafeteria waste.
2 - Refuse	An even mixture of rubbish and garbage, by weight
3 - Garbage	Animal and vegetation waste from restaurants, cafeterias, hotels, etc.
4 - Pathological Waste	Human and animal remains consisting of carcasses, organs, and solid organic waste from hospitals, laboratories, etc.
5 - Non-solid Waste	Gaseous, liquid, or semi-liquid waste such as tar, paints, solvents, sludge, fumes, etc. from industrial operations.
6 - Solid Waste	Waste such as rubber, plastics, wood waste etc. from industrial operations.

APPENDIX B

40 CFR 60, Subpart Dc

APPENDIX C

40 CFR 60, Subpart GG

Appendix D

Calculations

Sulfur Content of Engine Fuel

SO₂ emission factor used for SN-07 through SN-12: 0.29 lb SO₂/ MMBTU

$$(0.29 \text{ lb SO}_2 / \text{MMBTU}) * (0.1419 \text{ MMBTU/gal}) = 0.0412 \text{ lb SO}_2 / \text{gal}$$

$$(7.2 \text{ lb/gal}) * (\text{wt \% S in fuel}) * (2 \text{ lb SO}_2 / \text{lb S in fuel}) = (0.0412 \text{ lb SO}_2 / \text{gal})$$

$$\text{wt \% S in fuel} = 0.3 \%$$

INVOICE REQUEST FORM

PDS-

Date April 7, 2003

<input checked="" type="checkbox"/>	Air
<input type="checkbox"/>	NPDES
<input type="checkbox"/>	Stormwater
<input type="checkbox"/>	State Permits Branch
<input type="checkbox"/>	Solid Waste

CSN 60-0689

Facility Name Arkansas Children's Hospital
Invoice Mailing Address 800 Marshall Street, Little Rock, AR 72202

<input type="checkbox"/>	Initial
<input checked="" type="checkbox"/>	Modification
<input type="checkbox"/>	Annual

Permit Number 1923-A (Formerly 395-IR-2)
Permit Description Minor Source
Permit Fee Code A

Amount Due \$ 400

Engineer Leamons

Paid? ☐No ☐Yes Check #

Comments: Air Permit Fee Calculation (no change)(18.47)=\$400

Public Notice

Pursuant to A.C.A. §8-4-203, and the regulations promulgated thereunder, the Air Division of the Arkansas Department of Environmental Quality gives the following notice:

Arkansas Children's Hospital, located at 800 Marshall Street, Little Rock, AR 72202, has applied for modification to their existing minor source air permit (CSN: 60-0689). Upon final approval modifications to the permit will allow alternate methods for compliance with emission limits set by the permit. No changes in permitted emissions will occur from this permitting action.

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 Suzanne Carswell, Information Officer. Citizens desiring technical information concerning the application or permit should contact Bryan Leamons, Engineer. Both Suzanne Carswell and Bryan Leamons can be reached at the Department's central office, 8001 National Drive, Little Rock, Arkansas 72209, telephone: (501) 682-0744.

The draft permit and permit application are available for copying at the above address. A copy of the draft permit has also been placed at the Little Rock Public Library, 100 South Rock Street, Little Rock, AR 72201. This information may be reviewed during normal business hours.

Interested or affected persons may also submit written comments or request a hearing on the proposal, or the proposed modification, to the Department at the above address - Attention: Suzanne Carswell. 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 Section 2.1 of the Arkansas Pollution Control and Ecology Commission's Administrative Procedures (Regulation #8).

Dated this

Randall Mathis
Director