RESPONSE TO COMMENTS

ARKANSAS CHILDREN'S HOSPITAL
PERMIT #1923-AOP-R7
AFIN: 60-00689

On March 6, 2015, the Director of the Arkansas Department of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. During the comment period, written comments on the draft permitting decision were submitted on behalf of the facility. The Department's response to these issues follows.

Note: The following page numbers and condition numbers refer to the draft permit. These references may have changed in the final permit based on changes made during the comment period.

Comment #1:

These are four identical 3,622 hp diesel fired electric generators producing 2,500 kW. The permit lists Xylene emission rate for SN-18 is 0.01 lb/hr verse 0.03 lb/hr for SN19, 20, 21. Change the Xylene emission rate for all four generators to 0.03 lbs/hr. This affects the Emission Summary Table and SPC 15.

Response to Comment #1:

Xylene emissions at SN-18 have been corrected to 0.03 lb/hr. Total xylene lb/hr emissions from the facility in the Emission Summary Table were increased as well commensurately.

Comment #2:

Section IV: SN-02, SN-03, and SN-04

1. Sentence 3, "boilers are located ill the Hospital Boiler Plant." Correct to "located at the..."
2. Arkansas Children's Hospital uses natural gas as the primary fuel for all boilers (SN-02, SN-03, SN-04) at this facility, meeting the definition of a Gas-Fired Boiler as defined by 40 CFR Part 63 Subpart JJJJJJ 63.11237. Please add a statement or specific condition that these boilers meet the definition of a gas-fired boiler and are not subject to NESHAP 40 CFR Part 63 Subpart JJJJJJ.

Response to Comment #2:

The changes above have been made to the final permit as requested.

Comment #3:

Please modify source descriptions to identify determining factors for regulatory applicability.

Add a statement to the source description that these generators are not subject to NSPS IIII or NESHAP ZZZZ.

Response to Comment #3:

A statement concerning applicability of these rules has been added to the source description for SN-14 and SN-15 as requested.

Comment #4:

Please modify source descriptions for Power Generators to identify determining factors for regulatory applicability, emission controls, and emission certifications.

Response to Comment #4:

The source description has been changed to specifically state the applicability or inapplicability of the NSPS and NESHAPs to the generators as requested.

Comment #5:

Please add location to the source description for the gasoline tank.

Response to Comment #5:

The source description has been changed as requested.

Comment #6:

Remove reference to natural gas combustion limits in SPC 4. There are no natural gas combustion limits for SN-02, 03, 04.

Response to Comment #6:

The change has been made as requested.

Comment #7:

Request a change giving permittee the option to "test each batch of fuel oil received for sulfur content using a Department approved method, obtain a manufacturer's certification of the sulfur content of the fuel oil, or retain a transportation shipping document describing the sulfur content of the fuel oil in order to demonstrate compliance"

ACH would like to clarify that a shipping document such as a 'Bill of Lading' from the distributor will demonstrate compliance with this permit requirement.

Response to Comment #7:

A statement concerning the Bill of Lading has been added to Specific Conditions 6, 7b, 13, and 19 as requested.

Comment #8:

Clarify how the permittee can demonstrate compliance with these sulfur content, cetane (not centane) index or aromatic content. Add a condition (similar to specific condition 6, stating fuel testing, manufacturer certifications, or shipping documents are used to demonstrate compliance.

Change "**centane**" to "**cetane**" in all occurrences throughout the permit.

ACH would like to clarify that a shipping document such as a 'Bill of Lading' from the distributor will demonstrate compliance with these permit specific conditions.

Response to Comment #8:

The typographical error has been corrected in Specific Conditions 24 and 31c as requested. In condition 24 and 31c, it has been stated that a Bill of Lading will satisfy the fuel certification requirement.

Comment #9:

SPC 21, 22, 23, 26

Clarify how the permittee demonstrates compliance with these specific conditions.
ACH requests that we clarify these conditions by stating that the permittee complies with these conditions by keeping copy of the engine manufacturer emission performance data demonstrating compliance on file. This performance data was provided to the Department in a February, 2008 Minor Modification and April, 2013Administrative Amendment for SN-17.

Response to Comment #9:

Specific Condition 21 is the emission limitations that the facility had to meet during the compliance demonstration required by Specific Condition 26. Specific Condition 26 details the options for which the facility may determine compliance with the emission limitations for this source, but the facility has already chosen the option c, conducting an initial test, in satisfaction of the condition.

Specific Condition 23 requires the facility to maintain and operate the stationary CI ICE to achieve the emission standards of Specific Condition 21. Keeping a copy of the test data on site does not fulfill this requirement, as it a similar requirement to Plantwide Condition 5.

Specific Condition 22 states conditions at which the compliance tests had to occur; this condition is no longer relevant and will be removed.

Comment #10:

Remove reference to 60.4205 in SPC 26 as it applies to emergency engines. SN-17 is not an emergency engine.

Response to Comment #10:

The reference has been removed from the condition.

Comment #11:

Remove this condition, SPC 31b, as it is outdated and no longer applies. Applicable conditions are covered Specific Condition 31c.

Response to Comment #11:

The condition regarding an outdated fuel requirement has been removed.

Comment #12:

This condition correctly refers to Table 2d of Subpart ZZZZ but gives the values from Table 2a of Subpart ZZZZ. 36a reads "12 ppmvd" but should be 23 ppmvd.

Response to Comment #12:

The limit has been corrected to 23 ppmvd.

Comment #13:

Specify the compliance dates in this specific condition, 41.

Specify how the performance test must be conducted in this specific condition by referencing the table below it.

Remove references to other engine types not applicable to SN-16 and include the table Title.

Response to Comment #13:

The condition has been modified as requested.

Comment #14:

SPC 42, Table 5 is not identified in the permit. Specify the date the initial performance test is to be completed, in this case, 10/3/2013. ACH completed the required initial performance test on 9/25/2013. ACH submitted the passing results to the Department on 10/2/2013, acknowledged by Department letter dated 10/8/2013. Since this initial testing is complete, remove all language

in permit requiring it to be conducted or acknowledge in the permit it was completed with passing results of a greater than 70% CO emissions reduction and correct exhaust temperatures.

Remove references to 2SLB, 4SLB engines and keep specific requirements applicable to SN16.

Response to Comment #14:

The condition has been modified to state that the initial performance test requirement was completed.

Comment #15:

SPC 47, remove reference to 63.6620(f) as it is not applicable. Suspect this should be referencing 63.6620(i).

Response to Comment #15:

The citation reference has been corrected as requested.

Comment #16:

SPC 52, remove references to regulations non-applicable to SN-16. Correct "Table 2D" to Table 2d.

Please identify specifically what conditions must be met (such as those listed in Table 6, Item #10) or reference a permit specific condition that will demonstrate compliance.

Response to Comment #16:

The specific requirements that must be met from Table 6 of the subpart have been appended to this condition.

Comment #17:

SPC 53 remove references to regulations non-applicable to SN-16 including Tables 1A, 1B, 2A, and 2C.

Please identify specifically what must be reported or reference a permit specific condition. Instead of referring to the reporting requirements of 63.6650, refer to permit conditions 47, 48, 49, 50, and 51 below that already identifies what the applicable reporting requirements are.

Response to Comment #17:

The permit condition language was taken directly from the subpart, which included the inapplicable Table references. All of these were removed except 2B and 2D, which apply at the source.

The condition has been updated with references to where within the permit, the requirements of 63.6650 can be found.

Comment #18:

Please identify specifically what requirements in Table 8 of SPC 43 apply to SN-16 or reference other permit specific conditions.

Response to Comment #18:

It is the applicant's responsibility to identify any such requirements (§26.402). The comment is not specific enough for the Department to act on this request.

Comment #19:

Specifically identify what notifications, §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h), the permittee must submit in this condition, SPC 44. If all notifications are identified in other specific conditions, remove this condition.

Response to Comment #19:

It is the applicant's responsibility to identify any such requirements (§26.402). The comment is not specific enough for the Department to act on this request.

Comment #20:

Specifically identify what reports the permittee must submit in this condition, SPC 47, semi-Annual NESHAP for Source Categories Compliance Report.

Response to Comment #20:

The applicable excerpt from Table 7 of the Subpart has been modified to be clearer.

Comment #21:

Remove references to regulations not applicable to SN-16 in SPC 53. Only 63.6650(b)(5) applies to SN16 (this is specific condition #48(e) in the permit). Revise this condition to state the permittee shall use the established dates for submitting the first and subsequent Compliance reports according to the dates established in General Provision 7 and General Provision 21.

Response to Comment #21:

Because the facility has a Title V permit, it is correct that the compliance reports may be submitted according to 63.6650(b)(5) instead of (b)(1) through (b)(4). A statement concerning General Provision 7 and 21 has been added to this condition as requested.

Comment #22:

SPC 50 states "where the permittee is using a CPMS." Change to "is not using".

40 CFR 63.6650(d)

For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CPMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

Response to Comment #22:

This condition does not apply to the facility, which uses a CPMS. It has been removed from the final permit.

Comment #23:

SPC 53, specifically identify what records ACH must keep.

Response to Comment #23:

Records described in §63.10(b)(2)(vi) through (xi) for the CMS have been added to the condition.

Comment #24:

SPC 54, specifically identify what records ACH must keep. Refer to specific condition #52 instead of Table 6.

Response to Comment #24:

A reference has been added to the condition which references where in the permit these requirements of Table 6 are located.

Comment #25:

SPC 55 and 56, sentence 2 refers to Interim Conditions #3 and #4. Interim Conditions #3 and #4 is not found in the permit. Change this reference to the correct specific conditions.

Response to Comment #25:

The references have been corrected as requested.

Comment #26:

SPC 60, since SN-23 monthly throughput is less than 10,000 gallons, 63.1111(c) does not apply. Change to 63.1111(b).

Response to Comment #26:

The reference has been changed as requested.

Comment #27:

SPC 62, sentence 4 of this condition states that "Notification or reports specified in §63.11125, §63.11126, and Subpart A to Part 63 are not required to demonstrate compliance with Subpart CCCCCC". Notification requirements for Subpart CCCCCC are found in 63.11124 "What notifications must I submit and when?" and is not addressed in 63.11125 or 63.11126.

Amend specific condition to state the permittee is not required to comply with 63.11124, 63.11125 and 63.11126 or, add a specific condition stating the permittee is not required to make the notifications in 40 CFR 63.11124.

Response to Comment #27:

The language of the permit condition is directly from the subpart and will not be changed. There are no conditions for these portions of the Subpart 63.11125 or 63.11126, as these sections do not apply. However, the 63.11116(b) portion of the condition has been taken out and added as a separate condition for clarity.

Comment #28:

1. The description for the 2,800 gallon No. 2 Fuel Oil Tank for SN-16 needs to be amended.
2. The table is missing the 3,600 gallon No. 2 Fuel Oil Tank for SN-22.
3. The table is missing the 300 gallon diesel tank submitted in Administrative Amendment October, 2014 and approved by the Department in a letter dated November 14, 2014.

Response to Comment #28:

The changes to the Insignificant Activities list have been made as requested, with the exception that the 300 gallon diesel tank was classified as an A-3 activity instead of A-13.

ADEQ

ARKANSAS
Department of Environmental Quality

August 14, 2015

Joe Knight
Environmental Management Coordinator
Arkansas Children's Hospital
1 Children's Way
Little Rock, AR 72202

Dear Mr. Knight:

The enclosed Permit No. 1923-AOP-R7 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 4/24/2013.

After considering the facts and requirements of A.C.A. §8-4-101 et seq. as referenced by §8-4-304, and implementing regulations, I have determined that Permit No. 1923-AOP-R7 for the construction and operation of equipment at Arkansas Children's Hospital shall be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,

Stuart Spencer
Chief, Air Division

Enclosure: Final Permit

ADEQ
OPERATING
AIR PERMIT

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

Permit No. : 1923-AOP-R7

IS ISSUED TO:

Arkansas Children's Hospital
1 Children's Way
Little Rock, AR 72202
Pulaski County
AFIN: 60-00689

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:

August 14, 2015 AND August 13, 2020

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Stuart Spencer
Chief, Air Division, Air Division

August 14, 2015
Date

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

Table of Contents

SECTION I: FACILITY INFORMATION 4
SECTION II: INTRODUCTION 5
Summary of Permit Activity 5
Process Description 5
Regulations 6
Emission Summary 7
SECTION III: PERMIT HISTORY 13
SECTION IV: SPECIFIC CONDITIONS 15
SN-02, SN-03, and SN-04 15
SN-14 and SN-15 20
SN-16, SN-17, SN-18, SN-19, SN-20, SN-21, and SN-22 23
SN-23 44
SECTION V: COMPLIANCE PLAN AND SCHEDULE 47
SECTION VI: PLANTWIDE CONDITIONS 48
SECTION VII: INSIGNIFICANT ACTIVITIES 49
SECTION VIII: GENERAL PROVISIONS 51
APPENDIX A: 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial Commercial-Institutional Steam Generating Units
APPENDIX B: 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
APPENDIX C: 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
APPENDIX D: 40 CFR 63, Subpart CCCCCC- National Emission Standards for Hazardous Air Pollutants for Gasoline-Dispensing Facilities

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO_x	Nitrogen Oxide
PM	Particulate Matter
PM_{10}	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

SECTION I: FACILITY INFORMATION

PERMITTEE:	Arkansas Children's Hospital
AFIN:	60-00689
PERMIT NUMBER:	1923-AOP-R7
FACILITY ADDRESS:	1 Children's Way Little Rock, AR 72202
MAILING ADDRESS:	1 Children's Way Little Rock, AR 72202
COUNTY:	Pulaski County
CONTACT NAME:	Joe Knight
CONTACT POSITION:	Environmental Management Coordinator
TELEPHONE NUMBER:	(501) 680-1088
REVIEWING ENGINEER:	Paula Parker
UTM North South (Y):	Zone 15: 3844770.86 m
UTM East West (X):	Zone 15: 564847.94 m

SECTION II: INTRODUCTION

Summary of Permit Activity

Arkansas Children's Hospital (abbreviated ACH; AFIN: 60-00689), located at 1 Children's Way, Little Rock, in Pulaski County, is a medical hospital and research center dedicated to the needs of children. ACH provides medical care to children from the state of Arkansas as well as children from other regions of the country.

This revision is to address the following modifications to the facility's permit:

- Changing the classification of SN-17 as Power Generator in lieu of Emergency Generator and correcting NESHAP ZZZZ and NSPS IIII requirements;
- Correcting emission factors and emissions for CO and NOx at SN-17;
- Adding NESHAP 4Z requirements for SN-16;
- Changes to the Insignificant Activities list including description changes and removal of two, 250 gallon No. 2 Fuel Oil tanks and a 300 gallon diesel tank;
- Replacement of Cooling Tower #1 (IA) with a newer, more efficient model; and
- The addition of a 300 gallon gasoline tank (SN-23) as a permitted source and the associated NESHAP CCCCCC requirements

Total permitted emission changes for this revision were: increase in CO by 1.8 tpy, VOC by 0.1 tpy, and a decrease in NOx by 1.8 tpy.

Process Description

Steam Boilers (SN-02, SN-03, and SN-04)

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

- Steam Boilers #1 and #3 are 500-BHP Kewanee Firetube Steam Boilers. They discharge through vent stack SN-03.
- Steam Boiler #2 is a 250-BHP Kewanee Firetube Boiler. It discharges through vent stack SN-03.
- Steam Boiler #4 is a 500-BHP Hurst Firetube Boiler. It discharges through vent stack SN-02.

(The above boilers are located in the Hospital Boiler Plant.)

- Steam Boiler #6 is a 750-BHP Kewanee Firetube Steam Boiler and is located at the Energy Building. It discharges through SN-04.

Each boiler is permitted for operation with natural gas and No.2 distillate oil. No. 2 distillate fuel oil for Steam Boilers #1 through #4 is stored in a 10,152 gallon underground storage tank and in any of the various smaller day-tanks. Fuel oil for Steam Boiler #6 is stored in one 16,000-gallon tank and three 8,000-gallon above-ground storage tanks or several smaller day tanks.

Emergency Generators #5 and #6 (SN-14 and SN-15, respectively)

ACH operates two emergency generators. The generators are Caterpillar 500-kW diesel-fired generators that exhaust emissions separately through SN-14 and SN-15. Fuel oil for the generators is stored in one 16,000-gallon tank and three 8,000-gallon above-ground storage tanks or several smaller day tanks.

Office Building Generators #10 and #12 (SN-16 and SN-22, respectively)

Office Building Generator #10 is a 2,030-hp diesel-fired generator capable of producing 1,400 kW. The engine exhausts through its own stack (SN-16). The fuel is stored in a 2,800-gallon tank.

Office Building Generator #12 is a 2,206-hp electric generator capable of producing 1,500 kW. The engine exhausts through its own stack (SN-22). The generator is permitted for a maximum annual fuel usage of 60,000 gallons of No. 2 distillate fuel oil. The fuel is stored in a 2,800-gallon belly tank.

Power Generators #1 through #4 and #7 (SN-18, SN-19, SN-20, SN-21, and SN-17, respectively)

Power Generators #1 through #4 are 3,622-hp diesel-fired electric generators that exhaust emissions through stacks SN-18, SN-19, SN-20, and SN-21, respectively. Power Generator #7 is a Caterpillar 2,848-hp diesel-fired engine that produces 2,000 kW of electricity and exhausts emissions through stack SN-17. Fuel oil for the generators is stored in one 16,000-gallon and three 8,000-gallon above-ground storage tanks or various smaller day tanks.

Gasoline Storage Tank (SN-23)

The gasoline storage tank has a capacity of 300 gallons and an annual throughput of 1,500 gallons. It is used to refuel facility vehicles and equipment.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective September 13, 2014
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective November 18, 2012
40 CFR Part 60, Subpart Dc – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units**

Regulations
40 CFR Part 60, Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines***
40 CFR Part 63, Subpart ZZZZ – *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****
40 CFR 63, Subpart CCCCCC- *National Emission Standards for Hazardous Air Pollutants for Gasoline-Dispensing Facilities*

* The boilers at SN-02 and SN-04 are not subject to the PM standards of Dc, because they are each below 30 MMBTU/hr.

** SN-17, SN-18, SN-19, SN-20, SN-21 and SN-22 are affected sources under Subpart IIII.

*** SN-16, SN-17, SN-18, SN-19, SN-20, SN-21 and SN-22 are affected sources under Subpart ZZZZ.

Emission Summary

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	7.8	4.6
		PM_{10}	7.2	4.4
		SO_2	1.4	0.8
		VOC	18.1	5.5
		CO	97.6	49.9
		NOx	355.4	124.3
HAPs*		Benzene	0.40	0.09
		Acrolein	0.09	0.05
		POM	0.14	0.07
		Ethyl Benzene	0.12	0.01
		Hexane	0.32	0.64
		Methyl Tert-Butyl Ether	0.57	0.01
		Toluene	1.08	0.08
		Xylene	0.78	0.08

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
02	Steam Boiler #4 (21 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM	0.3	2.0
		PM_{10}	0.2	1.9
		SO_2	0.1	0.2
		VOC	0.1	1.4
		CO	1.4	20.6
		NO_X	2.4	24.9
		Benzene	0.01	0.01
		Hexane	0.03	0.44
		POM	0.01	0.01
		Toluene	0.01	0.01
03	Steam Boilers #1 (16.74 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM	0.3	
		PM_{10}	0.2	
		SO_2	0.1	
		VOC	0.1	
		CO	1.4	
		NO_X	2.4	
		Benzene	0.01	
		Hexane	0.03	
		POM	0.01	
		Toluene	0.01	
	Steam Boiler #2 (8.37 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM	0.2	
		PM_{10}	0.1	
		SO_2	0.1	
		VOC	0.1	
		CO	0.7	
		NO_X	1.2	
		Benzene	0.01	
		Hexane	0.02	
		POM	0.01	
		Toluene	0.01	

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
	Steam Boiler #3 (16.74 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM	0.3	
		PM_{10}	0.2	
		SO_2	0.1	
		VOC	0.1	
		CO	1.4	
		NO_X	2.4	
		Benzene	0.01	
		Hexane	0.03	
		POM	0.01	
		Toluene	0.01	
04	Steam Boiler #6 (25.1 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM	0.4	0.9
		PM_{10}	0.2	0.8
		SO_2	0.1	0.1
		VOC	0.2	0.6
		CO	2.1	8.8
		NO_X	3.6	10.7
		Benzene	0.01	0.01
		Hexane	0.05	0.19
		POM	0.01	0.01
		Toluene	0.01	0.01
14	500 kW Emergency Generator #5 (5.18 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.7	0.5
		PM_{10}	0.7	0.5
		SO_2	0.1	0.1
		VOC	0.1	0.1
		CO	0.6	0.4
		NO_X	14.6	9.1
		Benzene	0.01	0.01
		Acrolein	0.01	0.01
		POM	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.01	0.01
15	500 kW Emergency Generator #6 (5.18 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.7	
		PM_{10}	0.7	
		SO_2	0.1	
		VOC	0.1	
		CO	0.6	
		NO_X	14.6	
		Benzene	0.01	
		Acrolein	0.01	
		POM	0.01	
		Toluene	0.01	

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Xylene	0.01	
16	1,400 kW Office Building Generator #10 (14.42 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.7	0.2
		PM_{10}	0.7	0.2
		SO_2	0.1	0.1
		VOC	2.5	0.8
		CO	11.6	3.5
		NO_X	51.4	15.2
		Benzene	0.02	0.01
		Acrolein	0.01	0.01
		POM	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.02	0.01
17	2,000 kW Power Generator #7 (20 MMBTU/hr No. 2 Distillate Oil Only)	PM	2.4	0.5
		PM_{10}	2.4	0.5
		SO_2	0.1	0.1
		VOC	5.8	1.1
		CO	50.3	9.5
		NO_X	40.6	7.7
		Benzene	0.02	0.01
		Acrolein	0.01	0.01
		POM	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.03	0.01
18	2,500 kW Power Generator #1 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.4	0.4
		PM_{10}	0.4	0.4
		SO_2	0.1	0.1
		VOC	1.1	1.1
		CO	5.9	5.9
		NO_X	48.2	48.2
		Benzene	0.02	0.02
		Acrolein	0.01	0.01
		POM	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.03	0.03
19	2,500 kW Power Generator #2 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.4	
		PM_{10}	0.4	
		SO_2	0.1	
		VOC	1.1	
		CO	5.9	
		NO_X	48.2	
		Benzene	0.02	

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Acrolein	0.01	
		POM	0.01	
		Toluene	0.01	
		Xylene	0.03	
20	2,500 kW Power Generator #3 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.4	
		PM_{10}	0.4	
		SO_2	0.1	
		VOC	1.1	
		CO	5.9	
		NO_X	48.2	
		Benzene	0.02	
		Acrolein	0.01	
		POM	0.01	
		Toluene	0.01	
		Xylene	0.03	
21	2,500 kW Power Generator #4 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.4	
		PM_{10}	0.4	
		SO_2	0.1	
		VOC	1.1	
		CO	5.9	
		NO_X	48.2	
		Benzene	0.02	
		Acrolein	0.01	
		POM	0.01	
		Toluene	0.01	
		Xylene	0.03	
22	1,500 kW Office Building Generator #12 (14.42 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.2	0.1
		PM_{10}	0.2	0.1
		SO_2	0.1	0.1
		VOC	0.8	0.3
		CO	3.9	1.2
		NO_X	29.4	8.5
		Benzene	0.02	0.01
		Acrolein	0.01	0.01
		POM	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.02	0.01

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
23	300-gallon Gasoline Tank	VOC	3.8	0.1
		Benzene	0.19	0.01
		Ethyl Benzene	0.12	0.01
		Hexane	0.16	0.01
		Methyl Tert-Butyl Ether	0.57	0.01
		Toluene	0.94	0.01
		Xylene	0.57	0.01

*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

**Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

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 #1923-A was issued to ACH on September 12, 2000. The incinerator was permitted to only process pathological wastes with a 20% maximum plastic content. Due to the difficulties and hazards of monitoring the pathological waste stream, ACH has requested to discontinue surveys of each charge. The surveys have previously been required to show compliance with the 20% plastic limit. The request is granted by this permitting action on the basis that the pathological waste stream of a large hospital should remain consistent and the fact that this system has been specifically designed for this type of waste. Pollution control systems are adequately designed and calculations show that the requested plastic incineration will have insignificant contributions to dioxin and furan emissions. Only annual surveys will now be required to maintain compliance. Other issues addressed in this permitting action include a clarification in classes of wastes that will be allowed and an increase in permitted operating hours. Also, the permit addresses emissions resulting from boilers and emergency electrical generating equipment at ACH. The predominant pollutant at the facility is NO_X which is emitted at a rate of 90.3 tpy.

Permit #1923-AR-1 was issued on March 10, 2005. ACH requested to remove the medical waste incinerator (SN-01), a 150 kW electric generator (SN-11), and a 155 kW electric generator (SN-13). ACH requested the replacement of Steam Boiler #4 with a 21.0 MMBTU/hr boiler and to install two new 5.18 MMBTU/hr electric generators (SN-14 and SN-15). In order to address potential emergencies, the permitted annual #2 Distillate Fuel Oil limit was increased to 591,00 gallons. Permitted SO_2, VOC, and NO_X emissions increased by 21.0 tpy, 0.3 tpy, and 3.9 tpy respectively. Permitted PM/PM_{10} and CO emissions decreased by 3.8 tpy and 1.4 tpy, respectively.

Permit # 1923-AOP-R0 was issued on November 30, 2005. ACH requested to install a 2,032 BHP Electric Generator (SN-16) firing #2 Distillate Fuel Oil. ACH also requested to increase the #2 Distillate Fuel Combustion Limit by 60,000 gallons. ACH became a Title V source with the installation of SN-16. Annual emissions for PM/PM_{10}, SO_2, VOC, CO, and NO_X, increased by 1.2 tpy, 1.0 tpy, 1.4 tpy, 3.9 tpy, and 18.6 tpy, respectively.

Permit #1923-AOP-R1 was issued on July 17, 2008. ACH replaced Gas Turbine #2 (SN-06) with a 2,000 kW electric generator (SN-17) and a portable 1,825 kW electric generator (an insignificant activity) as a backup unit. Permitted emissions for SO_2, and NO_X decreased by 7.8 tpy and 1.2 tpy, respectively. Permitted VOC and CO increased by 0.4 tpy and 0.3 tpy, respectively.

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

Permit #1923-AOP-R2 was issued on March 11, 2009. ACH installed four (4) 2,500 kW No 2. distillate fuel oil fired power generators (SN-18, SN-19, SN-20, and SN-21). The emission increase associated with the modification was 0.4 tpy PM/PM_{10}, 1.3 tpy SO_2, 1.1 tpy VOC, 5.9 tpy CO, and 48.2 tpy NO_X. ACH removed Gas Turbine #1 (SN-05), four 250 kW power generators (SN-07, SN-08, SN-09, and SN-10), and a 62.5 kW power generator (SN-12). Overall, permitted CO and NO_X increased by 1.6 tpy and 19.6 tpy, respectively; while permitted PM/PM_{10}, SO_2, and VOC decreased by 1.2 tpy, 8.1 tpy, and 0.7 tpy, respectively.

Permit #1923-AOP-R3 was issued on November 18, 2009. The insignificant activities list was revised to include one new 16,000 gallon diesel fuel tank, one new cooling tower, five existing cooling towers, an existing maintenance woodworking facility, and three existing fire pump engines. Permitted emissions remain unchanged.

Permit #1923-AOP-R4 was issued on December 2, 2009. The insignificant activities list was revised to include one 800 hp, temporary, backup boiler. The temporary boiler will serve as back-up to Steam Boiler #6 (SN-04) while Steam Boilers #1 through #4 (SN-02 and SN-03) are unable to serve as back-up. Permitted emissions remain unchanged.

Permit #1923-AOP-R5 was issued on January 22, 2010. The Insignificant Activities list was revised to include a 180 kW emergency generator. Permitted emissions remained unchanged.

Permit #1923-AOP-R6 was issued on April 16, 2012. It was a renewal of the facility's existing Title V Permit, expiring November 29, 2010. Two items were removed from the Insignificant Activities list: Fire Pump Engine #2 (Category A-1), and the 800-hp Temporary Back-Up Boiler (A-13). A second 300-gallon day tank was added to the Insignificant Activities list (A-3). For SN-02, 03, and 04, the 12-month combustion limit for natural gas was removed. For all sources, the maximum sulfur content by weight of No. 2 distillate oil was updated to 0.0015%. For all sources, when emission factors were available for POM, Phenanthrene, and/or total PAH, all available factors were used for calculations, and the maximum level by source was used for emission limits, as POM. Office Building Generator #2 (SN-22) was added at this revision. Annual emission changes were as follows: -1.6 tpy PM, -1.8 tpy PM_{10}, -9.8 tpy SO_2, -1.3 tpy VOC, +1.5 tpy CO, -5.2 tpy NO_X , +0.08 tpy Benzene, +0.04 tpy Acrolein, and +0.02 tpy POM.

SECTION IV: SPECIFIC CONDITIONS

Steam Boilers
SN-02, SN-03, and SN-04
(Boilers #1 through #4 and #6)

Source Description

ACH operates 5 institutional, gas-fired, boilers for the purpose of atmospheric heat/humidity control. Each boiler is uses pipeline quality natural gas as the primary fuel source and No. 2 distillate fuel oil as a secondary fuel source. Each boiler is permitted to operate 8,760 hours per year on natural gas. No. 2 distillate oil is used during periods of gas curtailment, gas supply emergencies, and periodic testing or maintenance.

Steam Boiler #4 is a 500 BHP Hurst Firetube Boiler. The boiler is located in the Hospital Boiler Plant and discharges through its own vent stack (SN-02). No. 2 distillate fuel oil for this boiler is stored in a 10,152 gallon underground storage tank and various smaller day-tanks. The boiler was installed in 2003 and is subject to NSPS Dc.

Steam Boilers #1 and #3 are 500 BHP Kewanee Firetube Steam Boilers. Steam Boiler #2 is a 250 BHP Kewanee Firetube Boiler. Steam Boilers #1, #2, and #3 are located in the Hospital Boiler Plant and discharge through a single vent stack (SN-03). No. 2 distillate fuel oil for these boilers is stored in a 10,152 gallon underground storage tank and various smaller day-tanks. The boilers were installed in 1980, therefore are not subject to NSPS Dc.

Steam Boiler #6 is a 750 BHP Kewanee Firetube Steam Boiler. The boiler is located at the Energy Building and discharges through its own vent stack (SN-04). No. 2 distillate fuel oil for this boiler is stored in one 16,000-gallon tank and three 8,000-gallon above-ground storage tanks and various smaller day-tanks. The boiler was installed in 1995 and is subject to NSPS Dc.

ACH uses natural gas as the primary fuel for all boilers (SN-02, SN-03, SN-04) at this facility, meeting the definition of a Gas-Fired Boiler as defined by 40 CFR Part 63 Subpart JJJJJJ, §63.11237 and are not subject to NESHAP 40 CFR Part 63 Subpart JJJJJJ.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly and annual limits is demonstrated based on maximum hourly fuel consumption and compliance with Specific Conditions #4, #5, and #6. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
02	Steam Boiler #4 (21 MMBTU/hr	PM_{10}	0.2	1.9

SN	Description	Pollutant	lb/hr	tpy
	Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil	SO_2 VOC CO NO_X	0.1 0.1 1.4 2.4	0.2 1.4 20.6 24.9
03	Steam Boiler #1 (16.74 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM_{10} SO_2 VOC CO NO_X	0.2 0.1 0.1 1.4 2.4	
	Steam Boiler #2 (8.37 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM_{10} SO_2 VOC CO NO_X	0.1 0.1 0.1 0.7 1.2	
	Steam Boiler #3 (16.74 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM_{10} SO_2 VOC CO NO_X	0.2 0.1 0.1 1.4 2.4	
04	Steam Boiler #6 (25.1 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM_{10} SO_2 VOC CO NO_X	0.2 0.1 0.2 2.1 3.6	0.8 0.1 0.6 8.8 10.7

2. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly and annual limits is demonstrated based on maximum hourly fuel consumption and compliance with Specific Conditions #4, #5, and #6. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
02	Steam Boiler #4 (21 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil	PM Benzene Hexane POM Toluene	0.3 0.01 0.03 0.01 0.01	2.0 0.01
03	Steam Boiler #1 (16.74 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM Benzene Hexane POM Toluene	0.3 0.01 0.03 0.01 0.01	0.44 0.01 0.01
	Steam Boiler #2	PM	0.2	

SN	Description	Pollutant	lb/hr	tpy
	(8.37 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	Benzene Hexane POM Toluene	0.01 0.02 0.01 0.01	
	Steam Boiler #3 (16.74 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM Benzene Hexane POM Toluene	0.3 0.01 0.03 0.01 0.01	
04	Steam Boiler #6 (25.1 MMBTU/hr Primary Fuel: Natural Gas Secondary Fuel: No. 2 Distillate Oil)	PM Benzene Hexane POM Toluene	0.3 0.01 0.05 0.01 0.01	0.9 0.01 0.19 0.01 0.01

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Opacity Limit Natural Gas	Opacity Limit No. 2 Distillate Oil	Regulatory Citation Natural Gas	Regulatory Citation No. 2 Distillate Oil
02	5%	20%	§18.501	§19.503
03	5%	20%	§18.501	§19.503
04	5%	20%	§18.501	§19.503

4. The permittee shall not exceed fuel oil combustion limits and the fuel sulfur content set by the following table. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Rolling 12 month Combustion Limit No. 2 Distillate Oil (gallons)	Maximum Sulfur Content in No. 2 Distillate Oil (wt%)
02	120,000	0.0015
03		
04	60,000	0.0015

5. The permittee shall maintain monthly records to demonstrate compliance with the fuel limits in Specific Condition #4. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month

rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. The permittee shall demonstrate compliance with the maximum sulfur content in #2 distillate fuel oil as established in Specific Condition #4 by retaining the fuel certifications from the supplier each time a fuel shipment is received. A shipping document such as a 'Bill of Lading' from the distributor will demonstrate compliance with this permit requirement. Records shall be kept onsite and made available to Department personnel upon request. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

NSPS Dc Requirements

7. The boilers at SN-02 and SN-04 are affected sources of 40 CFR Part 60, Subpart Dc – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*. The permittee shall comply with all applicable standards and monitoring, compliance, and recordkeeping requirements of 40 CFR Part 60, Subpart Dc including but not limited to the following: [Regulation No. 19 §19.304 and 40 CFR §60.40c (a)]

   a. The permittee shall not cause to be discharged into the atmosphere any gas that contains SO_2 in excess of 0.50 lb/MMBTU heat input while combusting oil; or as an alternative, the permittee shall not combust oil that contains greater than 0.5 weight percent sulfur. The permittee does not qualify for the percent reduction requirements of Subpart Dc. [Regulation No. 19 §19.304 and 40 CFR §60.42c (d)]

   b. The permittee may demonstrate compliance with the SO_2 emission limit or fuel oil sulfur limit based on certification from the fuel supplier, as described under §60.48c (f). Otherwise the permittee shall demonstrate compliance through the applicable requirements of §60.44c. A shipping document such as a 'Bill of Lading' from the distributor will demonstrate compliance with this permit requirement. [Regulation No. 19 §19.304 and 40 CFR §60.42c (h)(1)]

   c. The fuel supplier certification shall include the name of the supplier and a statement from the supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c. [Regulation No. 19 §19.304 and 40 CFR §60.48c (f)(1)]

   d. The permittee is subject to the SO_2 and/or fuel oil sulfur limits at all times including periods of startup, shutdown, and malfunction. [Regulation No. 19 §19.304 and 40 CFR §60.42c (i)]

e. The permittee shall record and maintain records of the amounts of oil combusted during each day. These records shall be kept for a period of no less than two years. These records shall be kept on site, updated daily, and made available to Department personnel upon request. This condition does not supersede General Provision #6. [Regulation No. 19 §19.304 and 40 CFR §60.48c (g) and (i)]

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

Emergency Generators
SN-14 and SN-15
(Generators #8 and #9)

Source Description

Generators #8 and #9 are emergency use, 749 hp diesel-fired CI RICE electric generators capable of producing 500 kW each. Each engine is located at the Energy Building and exhausts through its own stack (SN-14 and SN-15 respectively). The fuel is stored in one 16,000 gallon and three 8,000 gallon aboveground storage tanks or various smaller day tanks. The engines were ordered prior to July 11, 2005 and manufactured on November 1, 2002 (SN-14) and September 20, 2002 (SN-15).

These generators are not subject to NSPS IIII because of their dates, or NESHAP ZZZZ, because they meet the definition of an emergency institutional generator.

Specific Conditions

8. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly and annual limits is demonstrated based on maximum hourly fuel consumption and compliance with Specific Conditions #11, #12 and #13. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
14	500 kW Emergency Generator #5 (5.18 MMBTU/hr No. 2 Distillate Oil Only)	PM_{10}	0.7	0.5
		SO_2	0.1	0.1
		VOC	0.1	0.1
		CO	0.6	0.4
		NO_X	14.6	9.1
15	500 kW Emergency Generator #6 (5.18 MMBTU/hr No. 2 Distillate Oil Only)	PM_{10}	0.7	
		SO_2	0.1	
		VOC	0.1	
		CO	0.6	
		NO_X	14.6	

9. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly and annual limits is demonstrated based on maximum hourly fuel consumption and compliance with Specific Conditions #11, #12 and #13. [Regulation No. 18 §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
14	500 kW Emergency Generator #5 (5.18 MMBTU/hr	PM	0.7	0.5
		Benzene	0.01	0.01
		Acrolein	0.01	0.01

SN	Description	Pollutant	lb/hr	tpy
	No. 2 Distillate Oil Only)	POM	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.01	0.01
15	500 kW Emergency Generator #6 (5.18 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.7	
		Benzene	0.01	
		Acrolein	0.01	
		POM	0.01	
		Toluene	0.01	
		Xylene	0.01	

10. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Opacity Limit No. 2 Distillate Oil	Regulatory Citation No. 2 Distillate Oil
14	20%	§19.503
15	20%	§19.503

11. The permittee shall not exceed the fuel oil combustion limits and the fuel sulfur content set by the following table. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Rolling 12 month Combustion Limit No. 2 Distillate Oil (gallons)	Maximum Sulfur Content in No. 2 Distillate Fuel Oil (wt%)
14	50,000	0.0015
15		

12. The permittee shall maintain monthly records to demonstrate compliance with the fuel limits in Specific Condition #11. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

13. The permittee shall demonstrate compliance with the maximum sulfur content in No. 2 distillate oil as established in Specific Condition #11 by retaining the fuel certifications from the supplier each time a fuel shipment is received. A shipping document such as a

'Bill of Lading' from the distributor will demonstrate compliance with this permit requirement. Records shall be kept onsite and made available to Department personnel upon request. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Power Generators
SN-16, SN-17, SN-18, SN-19, SN-20, SN-21, and SN-22
(Generators #1 through 4, #7, #10, and #12)

Source Description

Generator #10 is a non-emergency, 2,030 hp diesel-fired CI RICE electric generator capable of producing 1,400 kW. The engine is located at the Medical Office Building and exhausts through its own stack (SN-16). The fuel is stored in a 2,800 gallon belly tank. The engine was installed October of 2005. The date of manufacture was June 1, 2005. Therefore, the engine is not subject to NSPS IIII. The engine is subject to NESHAP ZZZZ. An oxidation catalyst is used to reduce CO emissions. A CPMS is used to monitor pressure drop across the catalyst and exhaust temperature.

Generator #7 is a non-emergency, 2,848 hp diesel-fired CI RICE electric generator capable of producing 2,000 kW. Cylinder displacement is 4.3125 L per cylinder. The engine is located at the Energy Building and exhausts through its own stack (SN-17). The fuel is stored in one 16,000 gallon and three 8,000 gallon aboveground storage tanks or various smaller day tanks. The engine was ordered in March of 2008 and manufactured on October 28, 2006. The engine is subject to NSPS IIII. Engine manufacturer data indicates the engine is capable of meeting the emission standards in Table 1 of Subpart IIII.

Generators #1 through #4 are non-emergency, 3,622 hp CI RICE diesel-fired electric generators capable of producing 2,500 kW each. Cylinder displacement is 4.3125 L per cylinder. Each engine is located at the Energy Building and exhausts through its own stack (SN-18, SN-19, SN-20, and SN-21, respectively). The fuel is stored in one 16,000 gallon and three 8,000 gallon aboveground storage tanks or various smaller day tanks. The engines were ordered after July 11, 2005 and manufactured on October 8, 2008. The engines are subject to NSPS IIII. The engines are certified to meet the emission standards of EPA 40 CFR Part 60 Subpart IIII and 40 CFR Part 89 Subpart D.

Generator #12 is a non-emergency, 2,206 hp CI RICE diesel-fired electric generator capable of producing 1,500 kW. Cylinder displacement is 4.3166 L per cylinder. The engine is located at the Medical Office Building and exhausts through its own stack (SN-22). The fuel is stored in a 3,600 gallon belly tank. The engines were ordered after July 11, 2005 and manufactured on August 16, 2011. The engine is subject to NSPS IIII. The engine is certified to meet the emission standards of EPA 40 CFR Part 60 Subpart IIII and 40 CFR Part 89 Subpart D.

Specific Conditions

14. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly and annual limits is demonstrated based on maximum hourly fuel consumption and compliance with Specific Conditions #17, #18 and #19. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
16	1,400 kW Power Generator #10 (14.42 MMBTU/hr No. 2 Distillate Oil Only)	PM_{10}	0.7	0.2
		SO_2	0.1	0.1
		VOC	2.5	0.8
		CO	11.6	3.5
		NO_X	51.4	15.2
17	2,000 kW Power Generator #7 (20 MMBTU/hr No. 2 Distillate Oil Only)	PM_{10}	2.4	0.5
		SO_2	0.1	0.1
		VOC	5.8	1.1
		CO	50.3	9.5
		NO_X	40.6	7.7
18	2,500 kW Power Generator #1 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM_{10}	0.4	--
		SO_2	0.1	--
		VOC	1.1	--
		CO	5.9	--
		NO_X	48.2	--
19	2,500 kW Power Generator #2 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM_{10}	0.4	--
		SO_2	0.1	--
		VOC	1.1	--
		CO	5.9	--
		NO_X	48.2	--
20	2,500 kW Power Generator #3 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM_{10}	0.4	--
		SO_2	0.1	--
		VOC	1.1	--
		CO	5.9	--
		NO_X	48.2	--
21	2,500 kW Power Generator #4 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM_{10}	0.4	--
		SO_2	0.1	--
		VOC	1.1	--
		CO	5.9	--
		NO_X	48.2	--
--	Total Combined Annual Emissions for Power Generators #1 through #4	PM_{10}	--	0.4
		SO_2	--	0.1
		VOC	--	1.1
		CO	--	5.9
		NO_X	--	48.2
22	1,500 kW Power Generator #12 (14.23 MMBTU/hr No. 2 Distillate Oil Only)	PM_{10}	0.2	0.1
		SO_2	0.1	0.1
		VOC	0.8	0.3
		CO	3.9	1.2
		NO_X	29.4	8.5

15. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly and annual limits is demonstrated based on maximum hourly

fuel consumption and compliance with Specific Conditions #17, #18 and #19. [Regulation No. 18 §18.801, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
16	1,400 kW Power Generator #10 (14.42 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.7	0.2
		Benzene	0.02	0.01
		Acrolein	0.01	0.01
		POM	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.02	0.01
17	2,000 kW Power Generator #7 (20 MMBTU/hr No. 2 Distillate Oil Only)	PM	2.4	0.5
		Benzene	0.02	0.01
		Acrolein	0.01	0.01
		POM	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.03	0.01
18	2,500 kW Power Generator #1 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.4	--
		Benzene	0.02	--
		Acrolein	0.01	--
		POM	0.01	--
		Toluene	0.01	--
		Xylene	0.03	--
19	2,500 kW Power Generator #2 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.4	--
		Benzene	0.02	--
		Acrolein	0.01	--
		POM	0.01	--
		Toluene	0.01	--
		Xylene	0.03	--
20	2,500 kW Power Generator #3 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.4	--
		Benzene	0.02	--
		Acrolein	0.01	--
		POM	0.01	--
		Toluene	0.01	--
		Xylene	0.03	--
21	2,500 kW Power Generator #4 (24.6 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.4	--
		Benzene	0.02	--
		Acrolein	0.01	--
		POM	0.01	--
		Toluene	0.01	--
		Xylene	0.03	--
--	Total Combined Annual Emissions for Power Generators #1 through #4	PM	--	0.4
		Benzene	--	0.02
		Acrolein	--	0.01
		POM	--	0.01

SN	Description	Pollutant	lb/hr	tpy
		Toluene	--	0.01
		Xylene	--	0.03
22	1,500 kW Power Generator #12 (14.23 MMBTU/hr No. 2 Distillate Oil Only)	PM	0.1	0.2
		Benzene	0.01	0.01
		Acrolein	0.01	0.01
		POM	0.01	0.01
		Toluene	0.01	0.01
		Xylene	0.02	0.01

16. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Opacity Limit No. 2 Distillate Oil	Regulatory Citation No. 2 Distillate Oil
16	20%	§19.503
17	20%	§19.503
18	20%	§19.503
19	20%	§19.503
20	20%	§19.503
21	20%	§19.503
22	20%	§19.503

17. The permittee shall not exceed the fuel oil combustion limits and the fuel sulfur content set by the following table. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Rolling 12 month Combustion Limit No. 2 Distillate Oil (gallons)	Maximum Sulfur Content in No. 2 Distillate Oil (wt%)
16	60,000	0.0015
17	51,200	0.0015
18	346,600	0.0015
19		
20		
21		
22	60,000	0.0015

18. The permittee shall maintain monthly records to demonstrate compliance with the fuel limits in Specific Condition #17. The permittee shall update these records by the

fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

19. The permittee shall demonstrate compliance with the maximum sulfur content in No. 2 distillate oil as established in Specific Condition #18 by retaining the fuel certifications from the supplier each time a fuel shipment is received. A shipping document such as a 'Bill of Lading' from the distributor will demonstrate compliance with this permit requirement. Records shall be kept onsite and made available to Department personnel upon request. [Regulation No. 19 §19.705 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

NSPS IIII Requirements for SN-17

20. SN-17 is an affected source of 40 CFR Part 60, Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*. This non-emergency CI engine was manufactured in October of 2006 and greater than 500 HP. [Regulation No. 19 §19.304 and 40 CFR §60.4200(a)(2)]

21. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the following emission standards, Table 1 to this subpart. [Regulation No. 19 §19.304 and 40 CFR §60.4204(a)]

Pollutant	Emission Limit g/kW-hr
VOC	1.3
NO_X	9.2
CO	11.4
PM	0.54

22. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 (Specific Condition 21) over the entire life of the engine. [Regulation No. 19 §19.304 and 40 CFR §60.4206]

23. The permittee, beginning October 1, 2010, shall only combust diesel fuel at SN-17 with a maximum sulfur content of 0.0015% by weight and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume. A shipping document such as a 'Bill of Lading' from the distributor will demonstrate compliance with this permit requirement. [Regulation No. 19 §19.304 and 40 CFR §60.4207 (b)]

24. The permittee shall operate and maintain SN-17 according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine

manufacturer. In addition, permittee may only change those settings that are permitted by the manufacturer. [Regulation No. 19 §19.304 and 40 CFR §60.4211 (a)]

25. As an owner or operator of a pre-2007 model year stationary CI internal combustion engine who must comply with the emission standards specified in §§60.4204(a), you must demonstrate compliance according to one of the methods specified. [Regulation No. 19 §19.304 and 40 CFR §60.4211 (b)]

    a. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

    b. Keeping records of engine manufacturer data indicating compliance with the standards.

    c. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

26. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows

    You must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

    In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

    [Regulation No. 19 §19.304 and 40 CFR §60.4211 (g)(3)]

27. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to the subparts of this section.

a. The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder.

b. Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.
Where:
STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

c. Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

[Regulation No. 19 §19.304 and 40 CFR §60.4212 (a,b,d)]

28. The permittee shall submit an initial notification as required in 40 CFR Part §60.7 (a)(1). The notification shall include the following information: [Regulation No. 19 §19.304 and 40 CFR §60.4214 (a)(1)]

a. Name and address of the owner or operator;

b. The address of the affected source;

c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

d. Emission control equipment; and

e. Fuel used.

29. The permittee shall keep records of the following information: [Regulation No. 19 §19.304 and 40 CFR §60.4214 (a)(2]

a. All notifications submitted to comply with 40 CFR Part §60, Subpart IIII and all documentation supporting any notification.

b. Maintenance conducted on the engine.

c. Documentation from the manufacturer that the engine is certified to meet the emission standards.

NSPS IIII Requirements for SN-18, 19, 20, 21, and 22

30. SN-18, SN-19, SN-20, SN-21 and SN-22 are affected sources of 40 CFR Part 60, Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*. Applicable provisions include, but are not limited to the following: [Regulation No. 19 §19.304 and 40 CFR §60.4200]

a. The permittee shall not discharge to the atmosphere any gases from SN-18, SN-19, SN-20, SN-21 or SN-22 that contain the following pollutants in excess of the specified limits. Compliance with this condition shall be demonstrated through compliance with Specific Condition #30d. [Regulation No. 19 §19.304 and 40 CFR §60.4204 (b)]

Pollutant	Emission Limit g/kW-hr
VOC	1.3
NO_X	9.2
CO	11.4
PM	0.54

b. The permittee, beginning October 1, 2010, shall only combust diesel fuel at SN-18, SN-19, SN-20, SN-21 or SN-22 with a maximum sulfur content of 0.0015% by weight and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume. A shipping document such as a 'Bill of Lading' from the distributor will demonstrate compliance with this permit requirement. [Regulation No. 19 §19.304 and 40 CFR §60.4207 (b)]

c. The permittee shall operate and maintain the stationary IC internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, permittee may only change those settings that are permitted by the manufacturer. [Regulation No. 19 §19.304 and 40 CFR §60.4211 (a)]

d. The permittee shall demonstrate compliance with the emission standards listed in Specific Condition #30(a) by installing an engine certified for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [Regulation No. 19 §19.304 and 40 CFR §60.4211 (c)]

e. The permittee shall submit an initial notification as required in 40 CFR Part §60.7 (a)(1). The notification shall include the following information: [Regulation No. 19 §19.304 and 40 CFR §60.4214 (a)(1)]

i. Name and address of the owner or operator;

ii. The address of the affected source;

iii. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

iv. Emission control equipment; and

v. Fuel used.

f. The permittee shall keep records of the following information: [Regulation No. 19 §19.304 and 40 CFR §60.4214 (a)(2]

i. All notifications submitted to comply with 40 CFR Part §60, Subpart IIII and all documentation supporting any notification.

ii. Maintenance conducted on the engine.

iii. Documentation from the manufacturer that the engine is certified to meet the emission standards.

NESHAP ZZZZ Requirements for SN-16

31. SN-16 is a stationary existing non-emergency CI RICE of greater than 500 hp, located at an area source of HAP. As such, SN-16 is an affected source of 40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. [§19.304 of Regulation 19 and 40 CFR §63.6585(a) and (c), §63.6590(a)(1)(iii), and §63.6675]

32. The permittee shall comply with the applicable emission limitations, operating limitations, and other requirements under 40 CFR Part 63, Subpart ZZZZ for SN-16 no later than May 3, 2013. [Regulation No. 19 §19.304 and 40 CFR §63.6595(a)(1)]

33. The permittee must meet the applicable notification requirements in 63.6645 and Subpart A. [Regulation 19 §19.304 and §63.6595(c)]

34. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in 63.6620 and Table 4 of this subpart. [Regulation 19 §19.304 and §63.6603]

35. The permittee must comply with the requirements in Table 2D to this subpart apply to SN-16. [Regulation No. 19 §19.304 and 40 CFR §63.6603(a), and Table 2D to Subpart ZZZZ of Part 63, Item #3a or 3b]

Table 2D	
For each . . .	**You must meet the following requirement, except during periods of startup . . .**
Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or
	b. Reduce CO emissions by 70 percent or more.

36. The permittee must comply with the operating limitations in Table 2B to this subpart that apply to SN-16. [Regulation No. 19 §19.304 and 40 CFR §63.6603(a), and Table 2B to Subpart ZZZZ of Part 63, Item #2]

Table 2B	
For each . . .	**You must meet the following requirement, except during periods of startup . . .**
Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
	b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.

37. The permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Beginning June 1, 2010, except as otherwise specifically provided in 40CFR 80 Subpart I (which contains 40 CFR 80.510), all nonroad diesel fuel is subject the following per-gallon standards: [Regulation No. 19 §19.304, 40 CFR §63.6604(a), and 40 CFR §80.510(b)]

    a. Sulfur content.
        i. 15 ppm maximum for NR diesel fuel.
    b. Cetane index or aromatic content, as follows:
        i. A minimum cetane index of 40; or
        ii. A maximum aromatic content of 35 volume percent.

38. The permittee must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply at all times. [Regulation 19 §19.304 and §63.6605(a)]

39. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [Regulation 19 §19.304 and §63.6605(b)]

40. You must conduct any initial performance test or other initial compliance demonstration according to Table 4 (below) to this subpart that apply to you within 180 days after the compliance date, May 3, 2013, that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2). The initial compliance performance test must be conducted prior to October 3, 2013. The initial performance test was conducted September 25, 2013.

You must conduct each periodic performance test in Table 4 of this subpart that applies to you. Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. [Regulation 19 §19.304 and §63.6612(a), §63.6620(a), §63.6630(a)]

Table 4

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. CI stationary RICE	a. reduce CO emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For CO and O_2 measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Measure the O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[abc] (heated probe not necessary)	(b) Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.
		iii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005)[abc] (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4	(c) The CO concentration must be at 15 percent O_2, dry basis.

41. You must conduct any initial performance test or other initial compliance demonstration according to Table 5 (below) to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2). This requirement was completed on September 25, 2013. [Regulation 19 §19.304 and §63.6612(a)]

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

42. The permittee, complying with the requirement to limit or reduce CO emissions and not using a CEMS must conduct subsequent performance tests every 8760 hours or three years, whichever comes first. [Regulation 19 §19.304 and §63.6615 and Table 3]

43. The permittee must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart. [Regulation 19 §19.304 and §63.6620(d)]

44. You must use Equation 1 of this section to determine compliance with the percent reduction requirement: [Regulation 19 §19.304 and 63.6620(e)(1)]

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (Eq.\ 1)$$

Where:
C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,
C_o = concentration of CO, THC, or formaldehyde at the control device outlet, and
R = percent reduction of CO, THC, or formaldehyde emissions.

45. You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen

and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section. [Regulation 19 §19.304 and §63.6620(e)(2)(i-iii)]

a. Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209\ F_d}{F_c} \quad \text{(Eq. 2)}$$

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu)

b. Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:

$$X_{CO2} = \frac{5.9}{F_o} \quad \text{(Eq. 3)}$$

X_{CO2} = CO_2 correction factor, percent.
5.9 = 20.9 percent O_2—15 percent O_2, the defined O_2 correction value, percent.

c. Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \quad \text{(Eq. 4)}$$

Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O_2.

C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected.

X_{CO2} = CO_2 correction factor, percent.

$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

46. The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. [Regulation 19 §19.304 and §63.6620(i)]

47. If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 (Specific Condition 41) of this subpart, you must install, operate, and maintain each CPMS according to the requirements in Specific Condition 47 (a) through (f) . [Regulation 19 §19.304 and §63.6625(b)(1-6)]

    a. You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in Specific Condition 47 (a)(i) through (v) and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in Specific Condition 47 (a) through (f) in your site-specific monitoring plan.
        i. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
        ii. Sampling interface (*e.g.,* thermocouple) location such that the monitoring system will provide representative measurements;
        iii. Equipment performance evaluations, system accuracy audits, or other audit procedures;
        iv. Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and
        v. Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

    b. You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

    c. The CPMS must collect data at least once every 15 minutes (see also §63.6635).

    d. For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

e. You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

f. You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

48. If the permittee has an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, the permittee must comply with either Specific Condition 48 (a) or (b). The permittee must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters. [Regulation 19 §19.304 and 40 CFR §63.6625(g)(1) and (2)]

a. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, *or*

b. Install an open crankcase filtration control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

49. Since the permittee operates a new, reconstructed, or existing stationary engine, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2D to 40 CFR 63, Subpart ZZZZ apply. [Regulation 19 §19.304 and §63.6625(h)]

50. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645. This requirement was completed on October 2, 2013. [Regulation 19 §19.304 and §63.6630(c)]

51. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [Regulation 19 §19.304 and §63.6635(b)]

52. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods. [Regulation 19 §19.304 and §63.6635(c)]

53. The permittee must demonstrate continuous compliance with each emission limitation and operating limitation in Table 2B and Table 2D (Specific Conditions 35and 36) to Subpart ZZZZ of Part 63 that apply to the permittee according to methods specified in Table 6 to Subpart ZZZZ of Part 63. [Regulation 19 §19.304 and §63.6640(a)]

Table 6		
For each . . .	**Complying with the requirement to . . .**	**You must demonstrate continuous compliance by ...**
Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b) of Specific Condition 47; and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

54. The permittee must report each instance in which the permittee does not meet each emission limitation or operating limitation in Tables 2B and 2D (Specific Conditions 35and 36) to Subpart ZZZZ of Part 63 that apply to the permittee. These instances are deviations from the emission and operating limitations in 40 CFR 63, Subpart ZZZZ. These deviations must be reported according to the requirements in §63.6650 (Specific Conditions 59 through 62). If the permittee changes the catalyst, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the permittee is meeting the required emission limitation applicable to stationary RICE. [Regulation 19 §19.304 and §63.6640(b)]

55. You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. [Regulation 19 §19.304 and §63.6640(e)]

56. The permittee must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to the permittee by the dates specified since the permittee has an existing stationary RICE located at an area source of HAP emissions. [Regulation 19 §19.304 and §63.6645(a)(2)]

57. If the permittee is required to conduct a performance test, the permittee must submit a Notification of Intent (NOI) to conduct a performance test at least sixty (60) days before the performance test is scheduled to begin as required in §63.7(b)(1) and in accordance with General Provision #7. [Regulation 19 §19.304 and §63.6645(g)]

58. If the permittee is required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 (Specific Conditions 40 and 41) to Subpart ZZZZ of Part 63, the permittee must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [Regulation 19 §19.304 and §63.6645(h)(2)]

    a. For each initial compliance demonstration required in Table 5 to Subpart ZZZZ of Part 63 that includes a performance test conducted according to the requirements in Table 3 to Subpart ZZZZ of Part 63, the permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2). [Regulation 19 §19.304 and §63.6645(h)(2)]

59. The permittee must submit each report in Table 7, Item #1 (below), to Subpart ZZZZ of Part 63 – Requirements for Reports that applies to the permittee. [Regulation 19 §19.304 and §63.6650, except (g)]

Table 7

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
Existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	Semiannually according to the requirements in §63.6650(b)(5)
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	
		c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	

60. The permittee must submit each report by the date in Table 7, Item #1, to Subpart ZZZZ of Part 63 and according to the requirements in §63.6650(b)(5) below: [Regulation 19 §19.304 and §63.6650(b)]

a. For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in §63.6650(b)(1) through (b)(4). These dates are established in General Provisions 7 and 21.

61. The Compliance report must contain the information below: [Regulation 19 §19.304 and §63.6650(c)]

a. Company name, AFIN, and address.

b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

c. Date of report and beginning and ending dates of the reporting period.

d. If the permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

e. If there are no deviations from any emission or operating limitations that apply to the permittee, a statement that there were no deviations from the emission or operating limitations during the reporting period.

f. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

62. For each deviation from an emission or operating limitation occurring for a stationary RICE where the permittee is using a CPMS to comply with the emission and operating limitations in 40 CFR 63, Subpart ZZZZ, the permittee must include information in §63.6650(c)(1) through (c)(4) and §63.6650 (e)(1) through (e)(12) below: [Regulation 19 §19.304 and §63.6650(e)]

a. The date and time that each malfunction started and stopped.

b. The date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks.

c. The date, time, and duration that each CPMS was out-of-control, including the information in §63.8(c)(8).

d. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

e. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during the reporting period.

f. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

g. A summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during the reporting period.

h. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

i. A brief description of the stationary RICE.

j. A brief description of the CPMS.

k. The date of the latest CPMS certification or audit.

l. A description of any changes in CPMS, processes, or controls since the last reporting period.

63. If the permittee must comply with the emissions and operating limitations, the permittee must keep the records described in §63.6655(a) below: [Regulation 19 §19.304 and §63.6655(a)]

a. A copy of each notification and report that the permittee submitted to comply with NESHAP Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirements in §63.10(b)(2)(xiv).

b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

c. Records of performance tests and performance evaluations as required by §63.10(b)(2)(viii).

d. Records of all required maintenance performed on the air pollution control and monitoring equipment.

e. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

64. For each CPMS, the permittee must keep the records listed in §63.6655(b)(1) through (3) below: [Regulation 19 §19.304 and §63.6655(b)]

a. Records described in §63.10(b)(2)(vi) through (xi).
   i. Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
   ii. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
   iii. All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
   iv. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
   v. All CMS calibration checks;
   vi. All adjustments and maintenance performed on CMS;

b. Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

c. Requests for alternatives to the relative accuracy test for CPMS as required in §63.8(f)(6)(i), if applicable.

65. The permittee must keep the records required in Table 6 (Specific Condition 53) to Subpart ZZZZ of Part 63 – Continuous Compliance with Emission Limitations, Operating Limitations, Work Practices, and Management Practices to show continuous compliance with each emission and operating limitation that applies to the permittee. [Regulation 19 §19.304 and §63.6655(d)]

66. The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if the permittee has an existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2D to Subpart ZZZZ of Part 63 – Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions. [Regulation 19 §19.304 and §63.6655(e)]

67. The permittee's records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). As specified in General Provision #5, the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [Regulation 19 §19.304 and §63.6660]

NESHAP ZZZZ Requirements for SN-17 through SN-22

68. SN-17 through SN-22 are affected sources of 40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. They will comply with the provisions of 40 CFR Part 63, Subpart ZZZZ by complying with the applicable provisions of 40 CFR Part 60, Subpart IIII. [Regulation No. 19 §19.304 and 40 CFR §63.6590 (c)]

Tank
SN-23
(300 Gallon Gasoline Storage Tank)

Source Description

The gasoline tank is a double walled steel with a capacity of 300 gallons and an annual throughput of 1,500 gallons. The tank is located at the Landscape shop. Construction of the tank commenced on December 17, 2014. The tank is used to refuel facility vehicles and equipment.

Specific Conditions

69. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly and annual limits is demonstrated based on maximum hourly fuel consumption and compliance with Specific Conditions 71 and 72. [Regulation No. 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
23	300-gallon Gasoline Tank	VOC	3.8	0.1

70. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the hourly and annual limits is demonstrated based on maximum hourly fuel consumption and compliance with Specific Conditions 71 and 72. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
23	300-gallon Gasoline Tank	Benzene	0.19	0.01
		Ethyl Benzene	0.12	0.01
		Hexane	0.16	0.01
		Methyl Tert-Butyl Ether	0.57	0.01
		Toluene	0.94	0.01
		Xylene	0.57	0.01

71. The permittee shall not exceed a throughput of 1,500 gallons of gasoline at SN-23 per rolling 12 month period. [Regulation 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

72. The permittee shall maintain monthly records to demonstrate compliance with Specific Condition #71. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. The twelve month rolling totals and each individual month's data shall be maintained on-site, made available to

Department personnel upon request, and submitted in accordance with General Provision #7. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]

NESHAP CCCCCC Conditions

73. SN-23 (300-gallon Gasoline Tank) is a gasoline storage tank at a gasoline dispensing facility at an area source of HAPs and thus an affected source under the definitions of 40 CFR §63 Subpart CCCCCC. Construction of SN-23 commenced after November 9, 2006, and thus it would be considered a new affected source. [Regulation 19 §19.304 and 40 CFR Part §63.11110 and 63.11132, Subpart CCCCCC]

74. SN-23 will start up after January 10, 2008 and thus must comply with the standards of 40 CFR §63 Subpart CCCCCC upon startup. [Regulation 19 §19.304 and 40 CFR Part §63.11113(a)(2) and §63.11111(b), Subpart CCCCCC]

75. The permittee shall have a monthly throughput of less than 10,000 gallons of gasoline at SN-23. [Regulation 19 §19.304 and 40 CFR Part §63.11111(b), Subpart CCCCCC]

76. The permittee shall, upon request by the Administrator, demonstrate that their monthly throughput at SN-23 is less than the 10,000-gallon threshold level. For SN-23 as a new source, recordkeeping to document monthly throughput must begin on startup. Records required under this condition shall be kept for a period of 5 years. Records must be made available within 24 hours of a request by the Administrator to document gasoline throughput at SN-23. [Regulation 19 §19.304 and 40 CFR Part §63.11111(e) Subpart CCCCCC]

77. The permittee is not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput. [Regulation 19 §19.304 and 40 CFR Part §63.11116(b), Subpart CCCCCC]

78. The permittee must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [Regulation 19 §19.304 and 40 CFR Part §63.11115(a), Subpart CCCCCC]

79. The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: [Regulation 19 §19.304 and 40 CFR Part §63.11116(a) and (d), Subpart CCCCCC]

a. Minimize gasoline spills;

b. Clean up spills as expeditiously as practicable;

c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use. Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with this item;

d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Arkansas Children's Hospital was inspected on April 2, 2013, by personnel from the Compliance Branch of the ADEQ Air Division. A May 1st letter titled "Preliminary Inspection Findings" indicated two (2) areas of concern:

1) The inspection letter noted that SN-17 was out of compliance with hours of operation limits noted in the permit. This mistake is being corrected with this application.

2) Initial Notifications were not submitted on time for SN-18, SN-19, SN-20, and SN-21. These notifications have been submitted since the time of inspection. A notification for SN-17 was also submitted.

The facility will be in compliance with these issues upon the issuance of the permit for this modification.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19 §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19 §19.410(B) and 40 CFR Part 52, Subpart E]

3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) calendar days after completing the testing. [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

4. The permittee must provide:

    a. Sampling ports adequate for applicable test methods;
    b. Safe sampling platforms;
    c. Safe access to sampling platforms; and
    d. Utilities for sampling and testing equipment.

    [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19 §19.303 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in applications dated May 20, 2010 and April 24, 2013.

Description	Category
Emergency Fire Pump Engine #3, ACHRI Alley; Exempt from Subpart ZZZZ; NSPS Subpart IIII N/A	A-1
Emergency Fire Pump Engine #4, Hospital West Wing; Exempt from Subpart ZZZZ; NSPS Subpart IIII N/A	A-1
180 kW Emergency Generator, IT Building; Exempt from Subpart ZZZZ; NSPS Subpart IIII N/A	A-1
8,000 Gallon No. 2 Fuel Oil AST #1, Energy Building	A-3
8,000 Gallon No. 2 Fuel Oil AST #2, Energy Building	A-3
8,000 Gallon No. 2 Fuel Oil AST #3, Energy Building	A-3
6,000 Gallon Jet Fuel AST, Hospital West Wing	A-3
2,800 Gallon No. 2 Fuel Oil AST, Medical Office Building, for SN-16	A-3
3,600 Gallon No. 2 Fuel Oil AST, Medical Office Building, for SN-22	A-3
1,000 Gallon No. 2 Fuel Oil Tank, Energy Building, for SN-17	A-3
Four (4) 400 Gallon No. 2 Fuel Oil Tank, Energy Building, for SN-18 through 21	A-3
300 Gallon No. 2 Fuel Oil Tank, for Emergency Fire Pump Engine #4	A-3
300 Gallon Diesel Fuel Tank, Landscape Shop	A-3
57 Gallon No. 2 Fuel Oil Tank, for Emergency Fire Pump Engine #3	A-3
125 Gallon No. 2 Fuel Oil Tank, Boiler Room; for Boilers #1 through #4	A-3
120 Gallon No. 2 Fuel Oil Tank, Energy Building; for Boiler #6	A-3
Two (2) 100 Gallon No. 2 Fuel Oil Tank, Energy Building; for SN-14 and 15	A-3
Laboratory Hoods (61), Hospital and ACHRI	A-5
10,152 Gallon No. 2 Fuel Oil UST, North of Hospital	A-13

Arkansas Children's Hospital
Permit #: 1923-AOP-R7
AFIN: 60-00689

Description	Category
16,000 Gallon No. 2 Fuel Oil AST, Energy Building	A-13
Six (6) Cooling Towers, (4) Hospital, (2) Energy	A-13

SECTION VIII: GENERAL PROVISIONS

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. [40 CFR 70.6(b)(2)]

2. 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. [40 CFR 70.6(a)(2) and Regulation 26 §26.701(B)]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will 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. [Regulation 26 §26.406]

4. 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, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26 §26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit.

    a. The date, place as defined in this permit, and time of sampling or measurements;
    b. The date(s) analyses performed;
    c. The company or entity performing the analyses;
    d. The analytical techniques or methods used;
    e. The results of such analyses; and
    f. The operating conditions existing at the time of sampling or measurement.

    [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26 §26.701(C)(2)]

6. The permittee must retain the records of all required monitoring data and support information for at least five (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. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26 §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If the permit establishes no other reporting period, the reporting period shall end on the last day of the month six months after the issuance of the initial Title V permit and every six months thereafter. The report is due on the first day of the second month after the end of the reporting period. The first report due after issuance of the initial Title V permit shall contain six months of data and each report thereafter shall contain 12 months of data. The report shall contain data for all monitoring requirements in effect during the reporting period. If a monitoring requirement is not in effect for the entire reporting period, only those months of data in which the monitoring requirement was in effect are required to be reported. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below:

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
5301 Northshore Drive
North Little Rock, AR 72118-5317

[40 CFR 70.6(a)(3)(iii)(A) and Regulation 26 §26.701(C)(3)(a)]

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.

   a. For all upset conditions (as defined in Regulation19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:

      i. The facility name and location;
      ii. The process unit or emission source deviating from the permit limit;
      iii. The permit limit, including the identification of pollutants, from which deviation occurs;
      iv. The date and time the deviation started;
      v. The duration of the deviation;
      vi. The average emissions during the deviation;
      vii. The probable cause of such deviations;

viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19 §19.601 and §19.602, Regulation 26 §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will 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. [40 CFR 70.6(a)(5), Regulation 26 §26.701(E), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26 §26.701(F)(1)]

11. 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 to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26 §26.701(F)(2)]

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26 §26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26 §26.701(F)(4)]

14. The permittee must 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 must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26 §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26 §26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26 §26.701(H)]

17. If the permit allows 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 operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26 §26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26 §26.702(A) and (B)]

19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26 §26.703(A)]

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26 §26.703(B)]

    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 required 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 assuring compliance with this permit or applicable requirements.

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually. If the permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due on the first day of the second month after the end of the reporting period. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26 §26.703(E)(3)]

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. Nothing in this permit will alter or affect the following: [Regulation 26 §26.704(C)]

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. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:

a. Such an extension does not violate a federal requirement;
b. The permittee demonstrates the need for the extension; and
c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[Regulation 18 §18.314(A), Regulation 19 §19.416(A), Regulation 26 §26.1013(A), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:

a. Such a request does not violate a federal requirement;
b. Such a request is temporary in nature;
c. Such a request will not result in a condition of air pollution;
d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Regulation 18 §18.314(B), Regulation 19 §19.416(B), Regulation 26 §26.1013(B), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:

a. The request does not violate a federal requirement;
b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

[Regulation 18 §18.314(C), Regulation 19 §19.416(C), Regulation 26 §26.1013(C), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

CERTIFICATE OF SERVICE

I, Pamela Owen, hereby certify that a copy of this permit has been mailed by first class mail to Arkansas Children's Hospital, 1 Children's Way, Little Rock, AR, 72202, on this 14th day of August, 2015.

Pamela Owen

Pamela Owen, ASIII, Air Division