Jefferson County Department of Health
Environmental Health Services
Air Pollution Control Program

University of Alabama at Birmingham
University and Hospital
Title V Operating Permit Renewal

Executive Summary

The University of Alabama at Birmingham (UAB) is located in the Five Points South neighborhood at 933 19th Street South in Birmingham, Alabama 35294. UAB holds a Title V Operating Permit for its boilers, emergency generators, incinerators, and gasoline dispensing facility. UAB is permitted as a Title V facility because of its campus-wide boiler capacity. This renewal updates the permit format and contents, and includes additions and deletions of insignificant units (which EPA required to be listed in the permit). There is no significant change in emissions.

The public comment period ran from February 27, 2022 through April 12, 2022. Comments were received. EPA has stated they do not object to permit issuance.

This permit was prepared by Kay Parker at extension 1560.

JEFFERSON COUNTY DEPARTMENT OF HEALTH
1400 6th Avenue South | Birmingham, AL 35233 (205) 933-9110 | www.jcdh.org
Serving Jefferson County Since 1917

Environmental Health Services
Jonathan Stanton, P.E., Director

April 19, 2022

Mr. J. David Hagan
Director of Environmental Management Program
University of Alabama at Birmingham
933 19th Street South
Birmingham, AL 35294

Dear Mr. Hagan,

Enclosed please find the Title V Operating Permit for the University of Alabama at Birmingham, located at 933 19th Street South in Birmingham, AL 35294.

Permit No.	Nature of Business:
4-07-1044-03	University and Hospital

If you have any questions or comments, please advise.

Sincerely,

Jonathan Stanton, Director
Environmental Health Services

JS/kp

Enclosures
Title V Permit

JEFFERSON COUNTY DEPARTMENT OF HEALTH
1400 6th Avenue South | Birmingham, AL 35233 (205) 933-9110 | www.jcdh.org
Serving Jefferson County Since 1917

Environmental Health Services
Jonathan Stanton, P.E., Director

April 19, 2022

Mr. Ron Gore
Alabama Department of Environmental Management
P.O. Box 301463
Montgomery, Alabama 36130-1463

Dear Mr. Gore,

Enclosed please find the Title V Operating Permit for the University of Alabama at Birmingham, located at 933 19th Street South in Birmingham, AL 35294.

Permit No.	Nature of Business:
4-07-1044-03	University and Hospital

If you have any questions or comments, please advise.

Sincerely,

Jonathan Stanton, Director
Environmental Health Services

JS/kp

Enclosures
Title V Permit

JEFFERSON COUNTY DEPARTMENT OF HEALTH

AIR POLLUTION PROGRAM

TITLE V OPERATING PERMIT

Permittee:	**UNIVERSITY of ALABAMA at BIRMINGHAM**
Location:	**933 19th Street South** **Birmingham, Alabama 35294**
Permit No:	**4-07-1044-03**
Issuance Date:	**April 19, 2022**
Expiration Date:	**April 18, 2027**
Nature of Business:	**University & Hospital**

Emissions Unit No.	Emissions Unit Description
001	Boilers
002	Emergency Generator Engines
003	Incinerators
004	Gasoline Dispensing Facility

This Permit is issued pursuant to and is conditioned upon the compliance with the provisions of the Jefferson County Board of Health Air Pollution Control Rules and Regulations, the applicable requirements of the Clean Air Act implementation plan for Alabama approved or promulgated by the United States Environmental Protection Agency (EPA) through rulemaking under title I of the Clean Air Act (identified in 40 CFR 52, Subpart B) and other applicable requirements as defined in section 18.1.1(e) of the Jefferson County Board of Health Rules and Regulations, Section 18 of the Alabama Air Pollution Control Act of 1971, Act No. 769 (Regular Session, 1971), Section 22-28-16 of the Alabama Air Pollution Control Act as amended, Orders of the Jefferson County Board of Health, Orders of the Director of the Alabama Department of Environmental Management (ADEM), and any applicable local, state or federal Court Order. This Permit is subject to the accuracy of all information submitted relating to the permit application and to the conditions appended hereto. It is valid from the date of issuance until the expiration date and shall be posted or kept under file at the source location described above and shall be made readily available for inspection at any reasonable time to any and all persons who may request to see it. This Permit is not transferable.

Pursuant to the Clean Air Act, conditions of this permit are federally enforceable by EPA, The Jefferson County Board of Health, ADEM and citizens in general. However, provisions that are not required by the Clean Air Act or under any of its applicable requirements, are considered to be Jefferson County provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate Sections of this Operating Permit and are specifically identified as not being federally enforceable.

Jonathan Stanton, Director
Environmental Health Services

Approved: Mark Wilson, M.D.
Health Officer

PREVENT · PROMOTE · PROTECT
JCDH
JEFFERSON COUNTY, AL · DEPARTMENT OF HEALTH

Table of Contents

In addition to compliance with Alabama Air Pollution Control Act Number 769 (Regular Session, 1971) and Act Number 612 (Regular Session, 1982) and with all applicable Air Pollution Control Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit. For each citation to a Jefferson County Board of Health regulation provided in connection with a permit condition (other than for those permit conditions that are specifically identified in the permit as not being federally enforceable), Appendix A to this permit identifies the corresponding ADEM regulation that has been approved by EPA as part of the Clean Air Act implementation plan for Alabama (identified in 40 CFR 52, Subpart B). The corresponding ADEM regulations, together with the cited Jefferson County Board of Health regulations, serve as the origin and authority for the associated permit term or condition.

GENERAL PERMIT CONDITIONS

No.	Federally Enforceable General Permit Conditions	Regulations
	Definitions	
1.	For the purposes of this Major Source Operating Permit, the following terms will have the meanings ascribed to in this permit: "12-Month Rolling Total" shall mean the total of monthly emissions calculations summed for a consecutive 12 month period and then compared to an annual emission or throughput limit to determine compliance. "40 CFR 51" is an acronym for Part 51 of Title 40 of the Code of Federal Regulations. "40 CFR 52" is an acronym for Part 52 of Title 40 of the Code of Federal Regulations. "40 CFR 59" is an acronym for Part 59 of Title 40 of the Code of Federal Regulations. "40 CFR 60" is an acronym for Part 60 of Title 40 of the Code of Federal Regulations. "40 CFR 61" is an acronym for Part 61 of Title 40 of the Code of Federal Regulations. "40 CFR 63" is an acronym for Part 63 of Title 40 of the Code of Federal Regulations. "40 CFR 64" is an acronym for Part 64 of Title 40 of the Code of Federal Regulations. "40 CFR 68" is an acronym for Part 68 of Title 40 of the Code of Federal Regulations. "40 CFR 82" is an acronym for Part 82 of Title 40 of the Code of Federal Regulations. "40 CFR 98" is an acronym for Part 98 of Title 40 of the Code of Federal Regulations. "Act" means the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. "ADEM" means the Alabama Department of Environmental Management. "Air Permit" shall mean any permit issued pursuant to Chapter 2 of the Rules and Regulations. "Air Pollution Emergency" shall mean a situation in which metrological conditions and/or contaminant levels in the ambient air reach or exceed the levels which may cause imminent and substantial endangerment to health. "Annual Rolling Total" shall be an equivalent phrase for "12-Month Rolling Total." "Capture system" means the equipment (including hoods, ducts, fans, etc.) used to contain, capture or transport a pollutant to a control device or an exhaust system. "Carbon dioxide equivalent or CO2e" means the number of metric tons of CO2 emissions with the same global warming potential as one metric ton of another greenhouse gas, and is calculated using Equation A-1 of 40 CFR 98. "CO" is an acronym for carbon monoxide.	1.3 18.7.1 60.2 60.41c 63.1

No.	Federally Enforceable General Permit Conditions	Regulations
	"CPMS" is an acronym for continuous parametric monitoring system. "Day" or "calendar day" means a 24-hour period beginning at midnight. "Department" means the Jefferson County Department of Health. "Deviation" means any instance in which the permittee fails to meet any requirement or obligation established by regulation, including but not limited to any emission limitation, operating limit, work practice standard, or any permit term or condition, or fails to meet any term or condition adopted to implement an applicable requirement, including but not limited to emission limitations during periods of startup, shutdown or malfunction. "Distillate oil" means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see 40 CFR §60.17), diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see 40 CFR §60.17), kerosine, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see 40 CFR §60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see 40 CFR §60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see 40 CFR §60.17). *40 CFR 60, Subpart Dc* "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God. These are situations that require immediate corrective actions(s) to restore normal operation, and that cause the facility to exceed a technology based emission limitation set by the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. "Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under §112(b) of the Act. "EPA" means the U.S. Environmental Protection Agency. "Exceedance" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring. "Federally enforceable" means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24. *40 CFR 60, Subpart Dc* "Fuel-Burning Equipment" shall mean any equipment, device or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, used primarily, but not exclusively, to burn any type fuel for the purpose of indirect heating in which the material being heated is not contacted by and adds no substance to the products of combustion. *1.3* "Fugitive Dust" shall mean solid air-borne particulate matter emitted from any source other than a flue or stack. *1.3*	

No.	Federally Enforceable General Permit Conditions	Regulations
	"Fugitive emissions" means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under §112 of the Clean Air Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source. 40 CFR 63, Subpart A "GHG" is an acronym for greenhouse gas. "HAP" is an acronym for Hazardous Air Pollutant. "Hazardous Air Pollutant" means any of the substances listed in Appendix D of the Rules and Regulations or §112(b) of the Clean Air Act. *40 CFR 63, Subpart A* "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. *40 CFR 63, Subpart A* "Modification" shall mean any physical change in, or change in the method of operation of, an affected source which increases the amount of any air contaminant (to which a rule or regulation applies) emitted by such source or which results in the emission of any air contaminant (to which a rule or regulation applies) not previously emitted, except that: (a) Routine maintenance, repair, and replacement shall not be considered physical changes, and (b) The following shall not be considered a change in the method of operation: (1) An increase in the production rate; (2) An increase in hours of operation; (3) Use of an alternate fuel or raw material. "NAAQS" is an acronym for "National Ambient Air Quality Standards." "Natural gas" means: (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or (2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see 40 CFR §60.17); or (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot). *40 CFR 60, Subpart Dc* "NESHAP" is an acronym for "National Emission Standards for Hazardous Air Pollutants." "New Source Review" (NSR) permitting means a system of evaluating the impact of any significant modification made at a major source and establishing permitting conditions to prevent the modification from causing or contributing to a violation of the NAAQS or consuming more than the allowed increment. These permitting provisions are located in Parts 2.4 and 2.5 of the Rules and Regulations. "NOX" is an acronym for nitrogen oxides. "NSPS" is any acronym for "New Source Performance Standards." "Oil" means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil. *40 CFR 60, Subpart Dc* "Opacity" shall mean the degree to which emissions reduce the transmission of light and obscure the view of the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium. *40 CFR 63, Subpart A*	

No.	Federally Enforceable General Permit Conditions	Regulations
	"Operating Permit" shall mean any permit issued pursuant to Chapter 18 of the Rules and Regulations. "Permittee" means the holder of an operating permit issued by the Department. "Performance audit" means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality. *40 CFR 63, Subpart A* "Performance evaluation" means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data. *40 CFR 63, Subpart A* "Performance test" means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard. *40 CFR 63, Subpart A* "PM" is an acronym for particulate matter. "PM10" is an acronym for particulate matter of less than 10 microns. "PM2.5" is an acronym for particulate matter of less than 2.5 microns. "Process" shall mean any action, operation, or treatment of materials, including handling and storage thereof, which may cause discharge of an air contaminant, or contaminants, into the atmosphere, but excluding fuel burning and refuse burning. *1.3* "Process Weight" shall mean the total weight in pounds of all materials introduced into any specific process which may cause any discharge into the atmosphere. *1.3* "Process Weight per Hour" shall mean the total weight of all materials introduced into any specific process that may cause any discharge of particulate matter. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. For a cyclic or batch operation, the process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour will be derived by dividing the process weight for a typical period of time by that time period. *1.3* "PSD" is an acronym for "Prevention of Significant Deterioration" permitting under Chapter 2.4 of the Rules and Regulations. "Responsible official" means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and the delegation of authority to such representatives is approved in advance by the Department. "RICE" is an acronym for reciprocating internal combustion engine. "Rules and Regulations" means the Jefferson County Board of Health Air Pollution Control Rules and Regulations. "Run" means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in 40 CFR §63. "SIP" is an acronym for "State Implementation Plan" pursuant to 40 CFR 52.	

No.	Federally Enforceable General Permit Conditions	Regulations
	"Six-Minute Average" shall be determined by calculating the arithmetic mean of twenty-four (24) consecutive opacity observations, taken at intervals of fifteen (15) seconds. "SO_2" is an acronym for sulfur dioxide. "Source" means any building, structure, facility, installation, article, machine, equipment, device, or other contrivance which emits or may emit any air contaminant. Any activity which utilizes abrasives or chemicals for cleaning or any other purpose (such as cleaning the exterior of buildings) which emits air contaminants shall be considered a source. *1.3* "Standard conditions" means a temperature of 293 K (68 °F) and a pressure of 101.3 kilopascals (29.92 in. Hg). *40 CFR 63, Subpart A, 1.3* "Stationary Source" means any building, structure, facility or installation that emits or may emit any regulated pollutant as defined in Part 18.1 of the Rules and Regulations or any pollutant listed in Appendix D of the Rules and Regulations. "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant which has been designated as hazardous by the Administrator. *CFR 63, Subpart A* "Visible emission" means the observation of an emission of opacity or optical density above the threshold of vision. *40 CFR 63, Subpart A* "VOC" is an acronym for volatile organic compound. "Volatile Organic Compound" means any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. This includes any such organic compound other than those listed under Part 1.3 of the Rules and Regulations and/or under 40 CFR §51.100(s)(1). In addition, the individual definitions as specified in each applicable rule, regulation, or standard shall be utilized where applicable.	
	General Conditions	
2.	**Basis for Permit** This Operating Permit is issued based on provisions contained in all existing Jefferson County Board of Health Air Pollution Control Rules and Regulations (hereinafter called Rules and Regulations in this permit). In the event amendments, revisions or additions are made to these Rules and Regulations, it shall be the responsibility of the permit holder (hereinafter called the permittee in this permit) to comply with such new Rules and Regulations. Additions and revisions to the conditions in this Operating Permit will be made by the Jefferson County Department of Health (hereinafter called the Department), if necessary, to assure that the Rules and Regulations are not violated.	AL Act 769
3.	**Authority** Nothing in this Operating Permit or conditions appended thereto shall negate any authority granted to this Department or the Health Officer pursuant to Alabama Air Pollution Control Act No. 769 (Regular Session, 1971) and Act No. 612 (Regular Session, 1982) or any regulations promulgated thereunder.	AL Act 769
4.	**Acceptance of Permit** The permittee is required to bring the operation of a source within the standards of Paragraph 18.2.8(a) of the Rules and Regulations. Commencing construction or operation of the source shall be deemed acceptance of all conditions specified. A Title V Operating Permit with revised conditions may be issued upon receipt of a new application if the permittee demonstrates that the source can operate within the standard of Paragraph 18.2.8(a) of the Rules and Regulations under the revised conditions.	18.2.4

No.	Federally Enforceable General Permit Conditions	Regulations
5.	**Compliance With Existing and Future Regulations** A. The permittee shall comply with all conditions of the Rules and Regulations. B. The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance. C. The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit, and shall follow any more detailed schedule of compliance set forth in the applicable requirement or unit specific permit requirements. D. The permittee shall be subject to any future MACT standards from the effective date as published by EPA and shall comply with the rule by the compliance date.	18.5.6 18.4.8(h) 18.7.3 18.7.6
6.	**Noncompliance** The permittee shall comply with all terms and conditions of the permit. Noncompliance with any term or condition of a permit will constitute a violation of the Act and the Rules and Regulations and may result in enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.	70.6(a)(6)(i) 18.5.6
7.	**Compliance Defense** The permittee shall not use as a defense in an enforcement action, that maintaining compliance with permit conditions would have required halting or reducing the permitted activity.	18.5.7
8.	**Credible Evidence** Any credible evidence or information relevant to whether a source may have been in compliance with applicable requirements can be used to establish whether or a not an owner or operator has violated or is in violation of any rule or standard in the Rules and Regulations and/or any applicable provisions of 40 CFR 60 or 40 CFR 61.	1.18 60.11(g) 61.12(e)
9.	**Circumvention** No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminants which would otherwise violate the Rules and Regulations.	1.15 60.12 61.19 63.4(b)
10.	**Bypass of Control Equipment Prohibited** Except as otherwise provided in this permit, the permittee shall not bypass, without prior approval from this Department, any air pollution control device. The permittee shall not shut down any air pollution control device unless such shutdown is accompanied by the corresponding shutdown of the respective source which the device is intended to control.	18.2.4
11.	**Shutdown of Control Equipment** In the case of shutdown of air pollution control equipment for scheduled maintenance, the intent shall be reported to this Department at least 24 hours prior to the planned shutdown unless the scheduled shutdown is accompanied with the shutdown of the source being controlled. The report shall contain the information listed in Section 1.12.1.	1.12.1
12.	**Maintenance of Controls** A. The permittee shall equip each fabric filter particulate matter control device with a pressure differential measuring device to measure the pressure drop across the filter media in the control device. The device shall be installed in a location which is easily accessible for inspection by Department personnel. B. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in accordance with the manufacturer's specifications or alternative procedures approved by the Department so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emissions of air contaminants shall be maintained near the source and provided to the Department upon request.	18.2.4 18.5.3(a)(2)

No.	Federally Enforceable General Permit Conditions	Regulations
	C. The permittee shall conduct routine inspections on all required control equipment. All inspection results and repair work performed on the pollution control device shall be recorded. These records shall be kept in a permanent form suitable for inspection.	
13.	**Nothing in this Operating Permit shall alter or affect the following:** A. The provisions of §303 of the Act (emergency orders), including the authority of the Administrator under that section; B. The liability of an owner or operator of a source 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.	18.10.3
14.	**Additional Information and Corrected Information** The permittee shall submit any additional information to the Department to supplement or correct an application promptly after becoming aware of the need for additional or corrected information. Also, the permittee shall submit additional information concerning any new requirements which have become applicable after a complete application has been filed but before a draft permit is released. Any change in the information already provided pursuant to 40 CFR 63 shall be provided in writing within 15 calendar days after the change.	18.4.7 63.9(j)
15.	**Display and Availability of Permit** The permittee shall keep this Operating Permit under file or on display at all times at the site where the source is located and shall make the permit available for inspection by any and all persons who may request to see it.	18.2.2
16.	**Payment of Fees** The permittee must have paid all fees required by the Rules and Regulations or the Operating Permit is not valid. Payment of operating permit fees required under Chapter 16 of the Rules and Regulations shall be made on or before the date specified under Section 16.5.1 of the Rules and Regulations of each year. Failure to make payment of fees within 30 days of the specified date shall cause the assessment of a late fee of 3% (of the original fee) per month or fraction thereof.	18.5.11 16.1 16.4 16.5
17.	**Transfer** This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another or from one person to another except as provided in Subparagraph 18.13.1(a)(5) of the Rules and Regulations.	18.2.6
18.	**New Air Pollution Sources and Changes to Existing Units** A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants. For any new source or modification of an existing source subject to 40 CFR 63, the permittee shall submit an application as required by 40 CFR §63.5.	1.5.15 60.7(a)(4) 63.5
19.	**Construction Not In Accordance with Applications** If the source permitted herein has not been constructed in accordance with the Operating Permit application and if the changes noted are of a substantial nature in that the amount of air contaminants emitted by the source may be increased or in that the effect is unknown, then the Operating Permit shall be revoked. No further application for an Operating Permit shall be accepted until the source has been reconstructed in accordance with the Operating Permit or until the permittee has proven to the Department that the change will not cause an increase in the emission of air contaminants.	18.2.8(e)

No.	Federally Enforceable General Permit Conditions	Regulations
20.	**Expiration** A source's right to operate shall terminate upon the expiration of this Operating Permit unless a timely complete renewal application has been submitted at least 6 months, but not more than 18 months before the date of expiration or the Department has taken final action approving the source's application for renewal by the expiration date. The expiration date of this Operating Permit is printed on the first page of this permit.	18.4.3 18.5.2 18.12.2(b)
21.	**Revocation** This Operating Permit may be revoked for any of the following reasons: A. Failure to comply with any conditions of the permit; B. Failure to establish and maintain such records, make such reports, install, use and maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as may be prescribed in accordance with Section 1.9.2 of the Rules and Regulations; C. Failure to comply with any provisions of any Department administrative order issued concerning the permitted facility; D. Failure to allow entry and inspections by properly identified Department personnel; E. Failure to comply with the Rules and Regulations; or F. For any other cause, after a hearing which establishes, in the judgment of the Department, that continuance of the permit is not consistent with the purpose of the Act or Rules and Regulations.	18.2.9
22.	**Severability** In case of legal challenge to any portion of this Operating Permit, the remainder of the permit conditions shall continue in force.	18.5.5
23.	**Reopening for Cause** Under any of the following circumstances, this Operating Permit will be reopened and revised prior to the expiration of the permit: A. Additional applicable requirements under the Clean Air Act become applicable to the permittee with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirements. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire. B. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit. C. The Department, ADEM or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. D. The Administrator, ADEM or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.	18.13.5
24.	**Changes or Termination for Cause – No Stay of Permit Conditions** This permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance or termination, or of a notification of a planned change or anticipated noncompliance will not stay any permit condition.	18.5.8
25.	**Requests for Information** The permittee shall furnish to the Department within 30 days, or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.	18.5.10 70.6(a)(6)(v)

No.	Federally Enforceable General Permit Conditions	Regulations
26.	**Entry and Inspections** The permittee shall allow the Department, ADEM, EPA or authorized representative, upon presentation of credentials and other documents that may be required by law, to conduct the following: A. Enter upon the permittee's premises where a source is located or emissions related activity is conducted or where records are kept pursuant to the permit conditions; B. Review and/or copy at reasonable times any records kept pursuant to the permit conditions; C. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices or operations required by the permit; and D. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements. Denial of access upon proper identification is grounds for permit revocation.	1.8 18.7.2 18.2.9(d)
27.	**Flexibility Changes** Certain changes (per §502 (b)(10) of the Act) can be made to this Operating Permit without a revision if no modification as defined in the Rules and Regulations would occur and the changes do not exceed the emissions allowed under this permit provided that written notification is sent to the Department and EPA at least 7 days before the change is made. The written notification shall describe the proposed change, the date of the change, any change in emissions, and any term or condition of the permit which is no longer valid due to the change.	18.13.2
28.	**Minor Permit Modifications** Minor permit modification procedures may be used only for those permit modifications that: A. Do not violate any applicable requirement; B. Do not involve significant changes to existing monitoring, reporting, or record keeping requirements in the permit; C. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; D. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include: 1. A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Act; and 2. An alternative emissions limit approved pursuant to regulations promulgated under §112(i)(5) of the Act; E. Are not modifications under any provision of title I of the Act; and F. Are not required by Part 18.12 of this Chapter to be processed as a significant modification. An application requesting the use of minor permit modification procedures shall meet the requirements of Section 18.4.8 relative to the modification and shall include the information listed at Paragraph 18.13.3(b). If the Department notifies the source that the modification does not qualify as a minor modification within 10 days after receiving the application, then the source shall apply for the change as a significant modification. Ten days after the application has been submitted to the Department, the source may make the change for which they applied unless the change does not qualify as a minor modification. After the source makes the change and until the Department takes final action on the permit application, the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and	18.13.3

No.	Federally Enforceable General Permit Conditions	Regulations
	conditions it seeks to modify may be enforced against it. A permit shield granted under Part 18.10 shall not extend to minor permit modifications. The Department may not issue a final permit modification until after EPA's 45-day review period or until EPA has notified the Department that EPA will not object to issuance of the permit modification, whichever is first.	
29.	**Significant Modifications** Modifications that are significant modifications under the new source review permitting provisions of Part 2.4 (Prevention of Significant Deterioration) or Part 2.5 (Nonattainment Areas) regulations, are modifications under the NSPS or NESHAPS regulations, or otherwise do not meet the requirements for minor permit modifications from Section 18.13.3 of the Rules and Regulations must be incorporated in the Operating Permit using the requirements for sources initially applying for an Operating Permit, including those for applications, public participation, review by affected States, review by ADEM, and review by EPA, as described in Parts 18.4 and 18.15 of the Rules and Regulations.	18.13.4
30.	**Off-Permit Changes** Any change which is not addressed or prohibited in the federally enforceable terms and conditions of the permit may be designated by the owner or operator as an off-permit change, and may be made without revision to the federally enforceable terms and conditions of the operating permit, provided that the change: A. Meets all applicable requirements; B. Does not violate any federally enforceable permit term or condition; C. Is not subject to any requirement or standard under title IV of the Clean Air Act; and D. Is not a modification under title I. The permittee must comply with all applicable state permitting and preconstruction review requirements. Any application pertaining to a change designated by the applicant as an off-permit change shall be submitted by the applicant to EPA in fulfillment of the obligation to provide written notice, provided, that no change meeting the criteria for an insignificant activity or trivial activity is subject to the procedures set forth in this condition.	18.14
31.	**Property Rights and Privileges** No property rights of any sort or any exclusive privilege are conveyed through the issuance of this Operating Permit.	18.5.9
32.	**Economic Incentives** No permit revision shall be required under any approved economic incentives, marketable permit emissions trading and other similar programs or processes for changes that are provided for in the Operating Permit.	18.5.12
33.	**Emission Reduction Plan** Upon notification by this Department, the permittee shall submit an Air Pollution Emission Reduction Plan in a format approved by this Department concerning air contaminant emissions reductions to be taken during declared air pollution episodes.	18.2.8(b)
34.	**Emergency Provision** A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emissions limitation under the Operating Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. B. Exceedances of emission limits during emergencies (as defined above) at a facility may be exempted from being violations provided that:	18.11.2 18.7.1

No.	Federally Enforceable General Permit Conditions	Regulations
	1. The permittee demonstrates that the event qualifies as an emergency as defined above; 2. The permittee can identify the cause(s) of the emergency; 3. At the time of the emergency, the permitted facility was being properly operated; 4. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; 5. The permittee submitted notice of the emergency to the Health Department within 2 working days of the time when emission limitations were exceeded due to the emergency, including those deviations attributable to upset conditions as defined in the permit, the probable cause of said deviations, and any corrective actions or preventive measures that were taken; 6. The permittee submitted a written documentation of what was reported in the notice of the emergency to the Department within 5 working days of the emergency with a certification signed by a responsible official consistent with Section 18.4.9 of the regulations; and 7. The permittee immediately documented the emergency exceedance in an "Emergency Log", which shall be maintained for 5 years in a form suitable for inspection upon request by a representative of the Department. This provision is in addition to any emergency or upset provision contained in any applicable requirement. The permittee has the burden of proof to assert and establish that excess emissions were attributable to an emergency in any enforcement proceeding.	
35.	**Obnoxious Odors** This Operating Permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Department inspectors, measures to abate the odorous emissions shall be taken upon determination by this Department that these measures are technically and economically feasible.	6.2.3
36.	**Title IV Requirements (Acid Rain Program)** Where an applicable requirement of the Rules and Regulations is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act (the acid rain program), both provisions shall be incorporated into the permit and shall be enforceable by the Administrator. Emissions exceeding any allowances that the permittee lawfully holds under title IV of the Act or the regulations promulgated thereunder are prohibited. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the permittee, however, allowances may not be used as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in the regulations promulgated pursuant to Title IV of the Act.	18.5.1(b) 18.5.4
37.	**Title VI Requirements (Refrigerants)** Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR 82, Subpart F. A. No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR 82, Subpart F.	40 CFR 82 18.1.1(e)(10) 18.1.1(w)(4)

No.	Federally Enforceable General Permit Conditions	Regulations
	B. The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR §82.166. Reports shall be submitted to the U.S. EPA and the Department as required.	
38.	**Asbestos Demolition and Renovation** Demolition and renovation activities at this facility are subject to the National Emission Standard for Asbestos, 40 CFR 61, Subpart M. To determine the applicable requirements of the Standard, the permittee must thoroughly inspect the affected part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos-containing materials, prior to the commencement of the demolition or renovation operation. The permittee shall comply with all applicable sections of the Standard, including notification requirements, emission control and waste disposal procedures. The permittee shall also ensure that anyone performing asbestos-related work at the facility is trained and certified according to the Alabama Department of Environmental Management's regulations for Asbestos Contractor Certification.	40 CFR 61 14.2.12
39.	**Prevention of Accidental Releases** The permittee shall comply with the requirements of §112(r) of the Act and 40 CFR 68 to prevent accidental releases of any substance listed pursuant to §112(r) or any other extremely hazardous substance.	112(r) 40 CFR 68
40.	**Testing** A source emissions test may be required by this Department at any time. The permittee shall provide each point of emission with sampling ports, ladders, stationary platforms, and other safety equipment to facilitate testing. The permittee shall notify the Department in writing at least 60 days prior to conducting any required emissions test on any source, including but not limited to opacity and visible emission observations. This notice shall state the source to be tested, the proposed time and date(s) of the test, the purpose of the test, and the methods to be used. A site-specific test plan and quality assurance program shall be included for sources subject to NESHAP. The methods for such testing shall be in accordance with methods and procedures established by 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63 and any emissions unit specific permit requirements. Performance testing to demonstrate compliance with an NSPS or NESHAP shall include a test method performance audit as required by 40 CFR §60.8(g), §61.13(e), or §63.7(c)(2)(iii)(A), respectively. The permittee shall submit the results of all emissions tests in written form to this Department within a time period specified by this Department; however, not to exceed 30 days from the test completion date unless a longer period is specified in the applicable subpart.	1.9.1 1.10 18.2.5 18.2.8(c) 60.8(d) 60.8(e) 60.8(g) 61.05(d) 61.13 63.7(a)(3) 63.7(b)-(d) 63.9(e) 63.9(f) 63.10(d) 63.7340(d) 63.7515(f)
41.	**Retention of Records** Records of all required monitoring data, fuel consumption, analyses, reports, safety data sheet (SDS), and other support information shall be retained for a minimum of 5 years from the date when the record was generated. Records must be readily accessible and suitable for inspection. Each record must be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, but may be maintained offsite for the remaining 3 years. Records may be kept in hard copy or electronically. Specific records to be made and retained are listed in the emission unit conditions.	18.5.3(b) 63.10(b)(1) 63.7343
	Facility-Specific General Conditions	
42.	**Fugitive Dust** A. The permittee shall take reasonable precautions to prevent dust from any operation, process, materials handling and storage, transportation activity (including dust from paved and unpaved roads), or construction activity (including but not limited to the use, repair, alteration, and demolition of buildings) at the facility from becoming airborne.	6.2.1 6.2.2 6.2.3 6.9.2 18.2.4

No.	Federally Enforceable General Permit Conditions	Regulations
	B. The permittee shall not cause or allow the discharge of visible emissions which travel beyond the property line of the facility. C. When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Health Officer may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. Airborne fugitive dust emissions shall be prevented and addressed as needed and as appropriate to weather conditions using any or all of the following pre-approved control measures specific to the following sources of fugitive dust: 1. Use of vacuum truck, street sweeper or water truck on paved surfaces; 2. Use of wet suppression system on unpaved surfaces without vegetation when conditions are dry and fugitive dust could become airborne and leave property lines; and 3. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, road repairs or the clearing of land. Wet suppression may be accomplished by the application of water with or without the addition of surfactants, wetting agents or other additives to increase the effectiveness of wet suppression. Manufacturer's documentation of the contents of any chemical, surfactant, wetting agent, or other additive used for dust suppression shall be maintained and readily made available upon request by the Department. Other dust control methods not listed above may be used subject to Department approval.	
	Recordkeeping, Reports and Notifications for Entire Facility	
43.	**General Recordkeeping Requirements** The permittee shall keep records of facility-wide operations, activities and materials which have the potential to release pollutants into the atmosphere in sufficient detail to show compliance with permit conditions and to allow the annual calculation of emissions of regulated pollutants and HAP from each point and fugitive source and activity at the facility. In addition to the records required in the conditions specific to each emission unit, the permittee shall maintain records of the following: A. All reports and notifications submitted to comply with this permit; B. Results of all required performance testing, monitoring and sampling; C. Available EDS, SDS and/or other manufacturer supplied contents information relating to the VOC and HAP contents of materials used at the facility; D. All spills or other mishaps of VOC/HAP materials. The record shall include the date, time, and quantity (gallons or pounds) of VOC/HAP materials spilled, recovered and the amount that evaporated to the atmosphere; and E. Records of required monitoring, including (as a minimum): 1. The date, place as defined in the permit, and time of sampling or measurements; 2. The date(s) analyses were performed; 3. The company or entity that performed the analyses; 4. The analytical techniques or methods used; 5. The results of such analyses; and 6. The operating conditions as existing at the time of sampling or measurement.	1.9.1 18.7.1 70.6(a)(3)(C)
44.	**Submission of Reports and Notifications** The permittee shall submit all reports and notifications required by any permit condition and by any applicable NESHAP and/or NSPS to the Department. The reports may be sent by U. S. mail, or common courier (i.e. UPS or FedEx). Reports submitted by US mail shall be postmarked on or before the due date. Reports submitted by electronic mail shall be received on or before the due date. **Any application form,**	18.7.1 18.4.9 18.7.5(d)

No.	Federally Enforceable General Permit Conditions	Regulations
	report or compliance certification required to be submitted pursuant to the Title V program regulations shall contain a certification by a responsible official that meets the requirements of Section 18.4.9 of the Rules and Regulations. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete. Each report shall identify the company name and address, the beginning and ending dates of the reporting period, and the date of report completion. The records required for each emissions unit shall be used in preparing these reports and notifications. The annual compliance certification shall be submitted to the following 2 agencies: Jefferson County Department of Health Air Pollution Control Program P.O. Box 2648 Birmingham, Alabama 35202-2648 and to EPA Region IV Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303	
	The following reports and notifications are required to be submitted:	
	A. **Annual Emissions Calculation**, due February 10 of each year. The permittee shall maintain the records required in the emission unit conditions. The permittee shall make calculations of the previous year's actual emissions (point and fugitive) of all regulated air pollutants, as defined in Paragraph 18.1.1(w) of the Rules and Regulations, which emanate from the facility. The calculations shall include, but may not be limited to, the following pollutants: TSP, PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, VOCs and HAPs. These calculations shall indicate the emissions from each emissions unit permitted, the fugitive emissions from on-site vehicular traffic, emissions from the combustion of motor fuels (diesel, gasoline, propane and natural gas), and emissions from spills, mishaps and other activities not elsewhere included. Documentation of the basis for the calculations, including but not necessarily limited to emission factors and relevant production data. Concurrence with the calculations by the Department shall be the basis for annual emission fees in accordance with Chapter 16 of the Rules and Regulations. Specific reporting requirements are located in: 1. Summary Table for Boiler Annual Emissions Reporting on page 18; 2. Condition 12 for Emergency Generators on page 35; 3. Condition 15 for the Incinerators on page 41; and 4. Condition 4 for Gasoline Dispensing on page 43.	1.9.2 1.5.15 18.7.1
	B. **Annual Title V Compliance Certification:** A compliance certification with terms and conditions contained in the permit, including emissions limitations, standards and work practices, covering the period from May 12 to May 11 of the following year, shall be submitted by June 12 each calendar year. The permittee shall provide a means for monitoring the compliance of its air pollution sources with the emissions limitation, standards and work practices listed or referenced within this permit. The compliance certification shall include the following: 1. The identification of each term or condition of the permit that is the basis of the certification; 2. The emission unit or units to which the term or condition applies; 3. The compliance status; 4. Whether compliance has been continuous or intermittent; 5. The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with the permit's monitoring and recordkeeping requirements; and 6. Such other facts as the Department may require to determine the compliance status of the source.	18.7.5
	C. **Annual Incinerator Reports for Subpart Ec** shall be submitted by January 30 of each calendar year for the previous year, and shall include the information listed in Condition 16 for Incinerators.	60.58c(d) 60.58c(g)

No.	Federally Enforceable General Permit Conditions	Regulations
	D. **Semi-Annual Title V Monitoring and Compliance Report**, due July 30 (covering January, February, March, April, May and June) and January 30 (covering July, August, September, October, November and December of the previous year). Each report must identify the company name, the date of the report, and the beginning and end dates of the reporting period. The report must include, as a minimum, the information and/or reports listed in the emission unit conditions at the following locations: 1. Conditions 6.B and 12.B for the Boilers (Subpart Dc); and 2. Condition 14 for the Incinerators (Subpart Ec).	1.9.2 1.5.15 18.5.3(c)(1) 18.2.4 18.7.1 63.1354(b)
	D. **Compliance Schedule Progress Reports** shall be submitted in accordance with any compliance schedule the permittee is subject to or becomes subject to during the permit term.	18.4.8(h)
	E. **Results of performance testing and CMS performance evaluations** within 30 days after completion.	1.9.2 18.7.1 63.1354(b)(6)
	F. **Episodic prompt reporting of malfunctions, deviations, emergencies and violations** of any permit condition, including but not limited to emission limitations, within 2 working days of the malfunction, deviation, emergency or discovery of a violation at any source of air pollution. The report shall include the probable cause of any deviation and any corrective actions or preventative measures that were taken.	1.12.2 18.5.3(c)(2) 63.10(d)(5)(ii)
	G. **Notifications** as follows: 1. Notification of performance testing as required by 40 CFR §60.8(d). 2. Any change in information already provided under 40 CFR §63 shall be submitted in writing within 30 calendar days after the change per §63.9(j). 3. Notify the Department in writing within 2 working days of becoming subject to a federal Maximum Achievable Control Technology (MACT) standard pursuant to §112 of the Act (local requirement).	 60.8 63.9(j) 18.2.4 18.7.1
	H. **Mandatory Greenhouse Gas Reporting (for informational purposes only)**:The permittee shall be aware that the facility may be required to report emissions of greenhouse gases directly to EPA under the Mandatory Greenhouse Gas Reporting rules. The reporting threshold is annual greenhouse gas emissions equal to 25,000 metric tons CO_2e, calculated using the methods presented in 40 CFR 98. Mandatory greenhouse gas reporting is made directly to EPA and is not an enforceable requirement of this Title V Major Source Operating Permit. It is the permittee's responsibility to determine whether reporting is required each calendar year.	40 CFR 98

APPLICABILITY OF NSPS AND NESHAP

Applicability of 40 CFR 60, Subpart Dc (NSPS)			Citation
Subpart Dc applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 million British thermal units per hour (MMBtu/hr) or less, but greater than or equal to 10 MMBtu/hr. The following units are subject to NSPS.			40 CFR §60.40c
North Pavilion Boiler 1 (2003) 33.475 MMBtu/hr (NG or Diesel)	North Pavilion Boiler 2 (2003) 33.6 MMBtu/hr (NG or Diesel)	West Pavilion Boiler 1 (1991) 20.922 MMBtu/hr (NG)	
Steam Plant Boiler 1 (2011) 99 MMBtu/hr (NG) or 95 MMBtu/hr (Diesel)	Steam Plant Boiler 2 (2011) 99 MMBtu/hr (NG) or 95 MMBtu/hr (Diesel)	Steam Plant Boiler 3 (2011) 99 MMBtu/hr (NG) or 95 MMBtu/hr (Diesel)	
Steam Plant Boiler 4 (2011) 99 MMBtu/hr (NG) or 95 MMBtu/hr (Diesel)	Women's & Infants Boiler 1 (2010) 32.659 MMBtu/hr (NG or Diesel)	Women's & Infants Boiler 2 (2010) 32.659 MMBtu/hr (NG or Diesel)	
Each of these units combusts natural gas as the primary fuel, and most are equipped and permitted to combust No. 2 Fuel Oil (diesel) as a standby fuel, as indicated in the description above.			

Applicability of 40 CFR 63, Subpart JJJJJJ (NESHAP)	Citation
Subpart JJJJJJ applies to industrial, commercial, or institutional boilers as defined in §63.11237 that are located at, or is part of, an area source of hazardous air pollutants (HAP).	40 CFR §63.11193
Gas-fired boilers and hot water heaters as defined in §63.11237 are exempt.	40 CFR §63.11195(e) & (f)
Gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.	40 CFR §63.11237
Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous, liquid, or biomass fuel and hot water is withdrawn for use external to the vessel. Hot water boilers (*i.e.*, not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 million Btu per hour are included in this definition. The 120 U.S. gallon capacity threshold to be considered a hot water heater is independent of the 1.6 million Btu per hour heat input capacity threshold for hot water boilers. Hot water heater also means a tankless unit that provides on-demand hot water.	40 CFR §63.11237
UAB has requested that the hours of operation of each boiler that is equipped to combust diesel as a standby fuel be restricted such each boiler will meet the definition of gas-fired boiler under Subpart JJJJJJ.	

ANNUAL EMISSIONS REPORTING

GROUP	Annual Emissions Report Based on Records from the Previous Calendar Year	Citations
ALL	Quantity of natural gas combusted and hours of natural gas combustion for CY, quantity fuel oil combusted and hours of fuel oil combustion for CY, emissions calculations based on permit emission factors or performance testing	1.5.15 1.9.2 18.7.1 18.5.3
A	Actual hours of operation and quantities of each fuel combusted must be accurately reported and must be used to calculate emissions	
B & C	Actual duration of fuel oil combustion must be accurately reported for each boiler	
D	Emissions from Group D may be estimated as a single unit based on actual natural gas consumption or potential to emit	

FEDERALLY ENFORCEABLE CONDITIONS FOR BOILERS

Emissions Unit No.	Group	Emissions Unit Description
001	A	4 Steam Generating Plant Boilers
	B	Other Boilers That Are Potentially Subject to 40 CFR 63, Subpart JJJJJJ
	C	Boilers That Are Categorically Exempt from 40 CFR 63, Subpart JJJJJJ

No.	Federally Enforceable Conditions for Boilers	Regulations
	Boilers Permitted Under Group A	
	The affected facility includes 4 identical boilers located at 1300 6th Avenue South. **Steam Plant Boiler 1** (2011) 99 MMBtu/hr (NG) or 95 MMBtu/hr (Diesel) **Steam Plant Boiler 2** (2011) 99 MMBtu/hr (NG) or 95 MMBtu/hr (Diesel) **Steam Plant Boiler 3** (2011) 99 MMBtu/hr (NG) or 95 MMBtu/hr (Diesel) **Steam Plant Boiler 4** (2011) 99 MMBtu/hr (NG) or 95 MMBtu/hr (Diesel)	
1.	**Requirements Established by Prior Permits** A. Natural gas shall be combusted as the primary fuel and is limited to a total of 1,565,142,857 Cubic Feet (CF) per year as a 12-month rolling total including all 4 boilers. B. No. 2 Fuel Oil may be combusted as a backup fuel and is limited to a total of 651,428 gallons per year as a 12-month rolling total including all 4 boilers. This fuel shall not contain sulfur in excess of 0.05% by weight. C. The total emissions of PM, SO_2, NO_X, CO and VOC from the 4 steam plant boilers shall not exceed the significance levels at 2.4.2(w). D. The permittee shall not cause or allow emissions from any boiler to exceed the following limits and shall conduct performance testing if required by the Department:	Avoidance of NSR 18.2.4 4-07-1044-01 4-07-1044-02
2.	**Emission Limitations from the State Implementation Plan (SIP)** The permittee shall not cause or allow emissions from this emission unit in excess of the emission limits below:	6.3 6.1.1 7.1.1

Pollutant /While Combusting	Natural Gas (lb/MMBtu)	No. 2 Distillate Oil (Diesel) (lb/MMBtu)	EPA Test Method (40 CFR 60, Appendix A)
PM	0.005	0.040	Method 5
SO_2	0.0006	0.051	Method 6c
NO_X	0.0364	0.1	Method 7E
CO	0.0375	0.04	Method 10
VOC	0.0055	0.04	Method 25A

Pollutant	Limit	Authority
Particulate Matter (PM)	$E = 1.38H^{-0.44}$, where E is emission rate (lb/MMBtu) and H is the heat input in MMBtu/hr E shall not exceed 0.50 lb/MMBtu for units smaller than 10 MMBtu/hr	6.3.1 6.3.2
Opacity	20 % opacity (6-minute average), except for one 6-minute period per hour of not more than 40 % opacity	6.1.1
SO_2	E shall not exceed 1.80 lb/MMBtu	

No.	Federally Enforceable Conditions for Boilers	Regulations
3.	**Compliance with SIP Emission Limits** The permittee shall demonstrate compliance with the emission limits using fuel records on a monthly basis. The VE observations required for the NSPS 40 CFR 60, Subpart Dc are also acceptable for the SIP opacity limit.	18.5.3(a)
4.	**Requirements of 40 CFR 60, Subpart Dc**	
	A. When burning oil, Subpart Dc limits opacity to 20% as a 6-minute average except for one 6-minute period per hour of not more than 27% opacity, as determined by EPA Method 9 of 40 CFR 60, Appendix A. During startup, shutdown and malfunction, only the SIP opacity limit applies.	60.43c(c) 60.45c(a)(8) 60.43c(d)
	B. Fuel oil combusted in these boilers shall not exceed 0.50 weight percent sulfur. The permittee shall maintain records of fuel supplier certifications that include the following information: 1. The name of the oil supplier; 2. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR §60.41c; and 3. The sulfur content or maximum sulfur content of the oil.	60.42c(d) 60.42c(h)(1) 60.43c(e)(4) 60.44c(h) 60.45c(d) 60.45c(e) 60.47c(c) 60.48c(f)
	C. Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975, kerosene, as defined by the American Society of Testing and Materials in ASTM D3699, biodiesel as defined by the American Society of Testing and Materials in ASTM D6751, or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467.	60.41c
	D. Periodic Method 9 performance tests, consisting of 3 separate 1-hour Method 9 runs, shall be performed while the unit is combusting fuel oil and operating under normal operating conditions. The observation period for Method 9 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10% and all individual 15-second observations are less than or equal to 20% during the initial 60 minutes of observation. Conduct Method 9 performance tests at the following frequency, as determined by the most recent Method 9 performance test results: 1. If no visible emissions (VE) are observed, conduct a subsequent Method 9 test within 12 months from the date when the most recent performance test was conducted or within 45 days of the next day that fuel oil is combusted, whichever is later; 2. If VE are observed but the maximum 6-minute average is less than or equal to 5%, conduct a subsequent Method 9 test within 6 months from the date when the most recent performance test was conducted or within 45 days of the next day that fuel oil is combusted, whichever is later; 3. If VE are observed and the maximum 6-minute average is greater than 5% but less than or equal to 10%, conduct a subsequent Method 9 test within 3 months from the date when the most recent performance test was conducted or within 45 days of the next day that fuel oil is combusted, whichever is later; or: 4. If VE are observed and the maximum 6-minute average is greater than 10%, conduct a subsequent Method 9 test within 45 days from the date when the most recent performance test was conducted.	60.47c(a)(1) 60.8(f)

No.	Federally Enforceable Conditions for Boilers	Regulations
	E. If the maximum 6-minute opacity was less than 10% during the most recent Method 9 performance test, the permittee may elect to perform subsequent testing using Method 22. The permittee shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel oil and demonstrate that the sum of any visible emissions is not in excess of 5 percent of the observation period (i.e. , 30 seconds per 10 minute period). 1. If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10-minute observation, immediately conduct a 30-minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 performance test using the procedures in Paragraph D above within 45 calendar days. 2. If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.	60.47c(a)(2) 60.8(f)
5.	**Requirements of to Avoid Applicability of 40 CFR 63, Subpart JJJJJJ** For each boiler, the permittee shall burn natural gas not combined with any solid fuels and burn No. 2 fuel oil only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.	63.11195(e) 63.11237
6.	**Recordkeeping & Reporting** A. The permittee shall maintain the following records specific to these units: 1. Records of the quantity of each fuel combusted on a monthly or more frequent basis. It is not necessary to meter each boiler separately. 2. Records of the monthly calculations of the 12-month rolling total of natural gas combusted in the 4 boilers and the 12-month rolling total of diesel combusted in the 4 boilers to show compliance with the agreed limits. 3. Records of the quantity of hours each boiler is operated. 4. Records of supplier fuel certification as required by 40 CFR 60, Subpart Dc. 5. Whenever No. 2 Fuel Oil is combusted, records of the duration (hours) and purpose of operation of each boiler to demonstrate that each boiler continues to be exempt from 40 CFR 63, Subpart JJJJJJ. 6. Records for each Method 9 performance test, including the date and time intervals of all opacity observation periods, the name, affiliation, and copy of current visible emission reading certification for each VE observer participating in the performance test, and copies of all VE observer opacity field data sheets. 7. Records for each Method 22 performance test, including the date and time intervals of all opacity observation periods, the name and affiliation for each VE observer participating in the performance test, copies of all VE observer opacity field data sheets, and documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the permittee to demonstrate compliance with the applicable monitoring requirements.. B. Semi-annual reporting for Subpart Dc shall include the calendar dates, records of fuel supplier certifications, and a certified statement signed by the responsible official that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.	18.5.3(b) 60.48c(g)(2) 60.48c(g)(3) Avoidance of NSR 18.5.3(b) 60.48c(f) 63.11195(e) 63.11237 60.48c(c)(1) 60.48c(c)(2) 60.48c(e)(11)

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Boilers</th><th>Regulations</th></tr>
<tr><td></td><td>Boilers Permitted Under Group B</td><td></td></tr>
<tr><td></td><td>The following boilers which were constructed after June 9, 1989 and have heat input capacity greater than or equal to 10 MMBtu/hr but less than or equal to 100 MMBtu/hr are subject to 40 CFR 60, Subpart Dc:

North Pavilion Boiler 1 (2003)
33.475 MMBtu/hr (NG or Diesel)

North Pavilion Boiler 2 (2003)
33.6 MMBtu/hr (NG or Diesel)

West Pavilion Boiler 1 (1991)
20.922 MMBtu/hr (NG)

Women's & Infants Boiler 1 (2010)
32.659 MMBtu/hr (NG or Diesel)

Women's & Infants Boiler 2 (2010)
32.659 MMBtu/hr (NG or Diesel)

X</td><td>60.40c(a)</td></tr>
<tr><td>7.</td><td><u>Requirements Established by Prior Permits</u>
A. The permittee shall combust natural gas as the primary fuel in these boilers.
B. The permittee may combust No. 2 Fuel Oil (Diesel) as a standby fuel in boilers that are equipped to combust diesel at the date this permit is issued. The duration of that diesel is combusted in an individual boiler shall not exceed 500 hours as a 12-month rolling total.
C. The permittee shall not cause or allow the emissions from Group B boilers to exceed the following emission limits to be used in emissions calculations and shall conduct performance testing if required by the Department:

<table>
<tr><th>Pollutant /While Combusting</th><th>Natural Gas (lb/MMBtu)</th><th>No. 2 Distillate Oil (Diesel) (lb/MMBtu)</th><th>EPA Test Method (40 CFR 60, Appendix A)</th></tr>
<tr><td>PM</td><td>0.003</td><td>0.018</td><td>Method 5</td></tr>
<tr><td>SO_2</td><td>0.0006</td><td>0.052</td><td>Method 6c</td></tr>
<tr><td>NO_X</td><td>0.095</td><td>0.13</td><td>Method 7E</td></tr>
<tr><td>CO</td><td>0.019</td><td>0.036</td><td>Method 10</td></tr>
<tr><td>VOC</td><td>0.005</td><td>0.005</td><td>Method 25A</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
</table></td><td>18.2.4
4-07-1044-02</td></tr>
<tr><td>8.</td><td><u>Emission Limitations from the State Implementation Plan (SIP)</u>
The permittee shall not cause or allow emissions from this emission unit in excess of the emission limits below:

<table>
<tr><th>Pollutant</th><th>Limit</th><th>Authority</th></tr>
<tr><td>Particulate Matter (PM)</td><td>$E = 1.38H^{-0.44}$, where E is emission rate (lb/MMBtu) and H is the heat input in MMBtu/hr

E shall not exceed 0.50 lb/MMBtu for units smaller than 10 MMBtu/hr</td><td>6.3.1
6.3.2</td></tr>
<tr><td>Opacity</td><td>20 % opacity (6-minute average), except for one 6-minute period per hour of not more than 40 % opacity</td><td>6.1.1</td></tr>
<tr><td>SO_2</td><td>E shall not exceed 1.80 lb/MMBtu</td><td></td></tr>
</table></td><td>6.3
6.1.1
7.1.1</td></tr>
</table>

No.	Federally Enforceable Conditions for Boilers	Regulations
9.	**Compliance with SIP Emission Limits** The permittee shall demonstrate compliance with the emission limits using fuel records on a monthly basis. The VE observations required for the NSPS 40 CFR 60, Subpart Dc are also acceptable for the SIP opacity limit.	18.5.3(a)
10.	**Requirements of 40 CFR 60, Subpart Dc**	
	A. When burning oil, Subpart Dc limits opacity to 20% as a 6-minute average except for one 6-minute period per hour of not more than 27% opacity, as determined by EPA Method 9 of 40 CFR 60, Appendix A. During startup, shutdown and malfunction, only the SIP opacity limit applies.	60.43c(c) 60.45c(a)(8) 60.43c(d)
	B. Fuel oil combusted in these boilers shall not exceed 0.50 weight percent sulfur. The permittee shall maintain records of fuel supplier certifications that include the following information: 1. The name of the oil supplier; 2. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in40 CFR §60.41c; and 3. The sulfur content or maximum sulfur content of the oil.	60.42c(d) 60.42c(h)(1) 60.43c(e)(4) 60.44c(h) 60.45c(d) 60.45c(e) 60.47c(c) 60.48c(f)
	C. Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975, kerosene, as defined by the American Society of Testing and Materials in ASTM D3699, biodiesel as defined by the American Society of Testing and Materials in ASTM D6751, or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467.	60.41c
	D. Periodic Method 9 performance tests, consisting of 3 separate 1-hour Method 9 runs, shall be performed while the unit is combusting fuel oil and operating under normal operating conditions. The observation period for Method 9 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10% and all individual 15-second observations are less than or equal to 20% during the initial 60 minutes of observation. Conduct Method 9 performance tests at the following frequency, as determined by the most recent Method 9 performance test results: 1. If no visible emissions (VE) are observed, conduct a subsequent Method 9 test within 12 months from the date when the most recent performance test was conducted or within 45 days of the next day that fuel oil is combusted, whichever is later; 2. If VE are observed but the maximum 6-minute average is less than or equal to 5%, conduct a subsequent Method 9 test within 6 months from the date when the most recent performance test was conducted or within 45 days of the next day that fuel oil is combusted, whichever is later; 3. If VE are observed and the maximum 6-minute average is greater than 5% but less than or equal to 10%, conduct a subsequent Method 9 test within 3 months from the date when the most recent performance test was conducted or within 45 days of the next day that fuel oil is combusted, whichever is later; or 4. If VE are observed and the maximum 6-minute average is greater than 10%, conduct a subsequent Method 9 test within 45 days from the date when the most recent performance test was conducted.	60.47c(a)(1) 60.8(f)

No.	Federally Enforceable Conditions for Boilers	Regulations
	E. If the maximum 6-minute opacity was less than 10% during the most recent Method 9 performance test, the permittee may elect to perform subsequent testing using Method 22. The permittee shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel oil and demonstrate that the sum of any visible emissions is not in excess of 5 percent of the observation period (i.e. , 30 seconds per 10 minute period). 1. If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10-minute observation, immediately conduct a 30-minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 performance test using the procedures in Paragraph D above within 45 calendar days. 2. If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.	60.47c(a)(2) 60.8(f)
11.	**Requirements of to Avoid Applicability of 40 CFR 63, Subpart JJJJJJ** For each boiler, the permittee shall burn natural gas not combined with any solid fuels and burn No. 2 fuel oil only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.	63.11195(e) 63.11237
12.	**Recordkeeping & Reporting** A. The permittee shall maintain the following records specific to these units: 1. Records of the quantity of each fuel combusted on a monthly or more frequent basis. It is not necessary to meter each boiler separately. 2. Records of the monthly calculations of the 12-month rolling total of hours during which diesel was combusted in these boilers to show compliance with the 500 hour limit. 3. Records of the quantity of hours each boiler is operated. 4. Records of supplier fuel certification as required by 40 CFR 60, Subpart Dc. 5. Whenever No. 2 Fuel Oil is combusted, records of the duration (hours) and purpose of operation of each boiler to demonstrate that each boiler continues to be exempt from 40 CFR 63, Subpart JJJJJJ. 6. Records for each Method 9 performance test, including the date and time intervals of all opacity observation periods, the name, affiliation, and copy of current visible emission reading certification for each VE observer participating in the performance test, and copies of all VE observer opacity field data sheets. 7. Records for each Method 22 performance test, including the date and time intervals of all opacity observation periods, the name and affiliation for each VE observer participating in the performance test, copies of all VE observer opacity field data sheets, and documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the permittee to demonstrate compliance with the applicable monitoring requirements.. B. Semi-annual reporting for Subpart Dc shall include the calendar dates, records of fuel supplier certifications, and a certified statement signed by the responsible official that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.	18.5.3(b) 60.48c(g)(2) 60.48c(g)(3) Avoidance of NSR 18.5.3(b) 60.48c(f) 63.11195(e) 63.11237 60.48c(c)(1) 60.48c(c)(2) 60.48c(e)(11)

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Boilers</th><th>Regulations</th></tr>
<tr><td></td><td>Boilers Permitted Under Group C</td><td></td></tr>
<tr><td>13.</td><td>The affected facility includes the following boilers that are not subject to the NSPS but have the potential to be subject to NESHAP (may combust No. 2 Fuel Oil and exceed 1.6 MMBtu/hr heat input capacity):
Campbell Hall 1 (1979)
5.23 MMBtu/hr (NG or Diesel)
Campbell Hall 2 (1979)
5.23 MMBtu/hr (NG or Diesel)
McCallum BHSB Boiler 1 (1982)
25.106 MMBtu/hr (NG or Diesel)
McCallum BHSB Boiler 2 (1982)
25.106 MMBtu/hr (NG or Diesel)
UAB Highlands Boiler 1
11.716 MMBtu/hr (NG or Diesel)
UAB Highlands Boiler 2
11.716 MMBtu/hr (NG or Diesel)
UAB Highlands Boiler 3
11.716 MMBtu/hr (NG or Diesel)
SEBLAB Boiler 1 (2008)
7 MMBtu/hr (NG or Diesel)
SEBLAB Boiler 2 (2008)
7 MMBtu/hr (NG or Diesel)
SEBLAB Boiler 3 (2008)
7 MMBtu/hr (NG or Diesel)
Wallace Bell Boiler 1 (1984)
4.25 MMBtu/hr (NG or Diesel)
X</td><td></td></tr>
<tr><td>14.</td><td><u>Requirements Established by Prior Permits</u>
A. The permittee shall combust natural gas as the primary fuel in these boilers.
B. The permittee may combust No. 2 Fuel Oil (Diesel) as a standby fuel in boilers that are equipped to combust diesel at the date this permit is issued. The duration that diesel is combusted in an individual boiler shall not exceed 500 hours as a 12-month rolling total.
C. The permittee shall not cause or allow the emissions from Group C boilers to exceed the following emission limits to be used in emissions calculations and shall conduct performance testing if required by the Department:
<table><tr><th>Pollutant /While Combusting</th><th>Natural Gas (lb/MMBtu)</th><th>No. 2 Distillate Oil (Diesel) (lb/MMBtu)</th><th>EPA Test Method (40 CFR 60, Appendix A)</th></tr><tr><td>PM</td><td>0.003</td><td>0.018</td><td>Method 5</td></tr><tr><td>SO_2</td><td>0.0006</td><td>0.052</td><td>Method 6c</td></tr><tr><td>NO_X</td><td>0.095</td><td>0.13</td><td>Method 7E</td></tr><tr><td>CO</td><td>0.019</td><td>0.036</td><td>Method 10</td></tr><tr><td>VOC</td><td>0.005</td><td>0.005</td><td>Method 25A</td></tr><tr><td></td><td></td><td></td><td></td></tr></table></td><td>18.2.4
4-07-1044-02</td></tr>
<tr><td>15.</td><td><u>Emission Limitations from the State Implementation Plan (SIP)</u>
The permittee shall not cause or allow emissions from this emission unit in excess of the emission limits below:
<table><tr><th>Pollutant</th><th>Limit</th><th>Authority</th></tr><tr><td>Particulate Matter (PM)</td><td>$E = 1.38H^{-0.44}$, where E is emission rate (lb/MMBtu) and H is the heat input in MMBtu/hr
E shall not exceed 0.50 lb/MMBtu for units smaller than 10 MMBtu/hr</td><td>6.3.1
6.3.2</td></tr><tr><td>Opacity</td><td>20 % opacity (6-minute average), except for one 6-minute period per hour of not more than 40 % opacity</td><td>6.1.1</td></tr><tr><td>SO_2</td><td>E shall not exceed 1.80 lb/MMBtu</td><td></td></tr></table></td><td>6.3
6.1.1
7.1.1</td></tr>
</table>

No.	Federally Enforceable Conditions for Boilers	Regulations
16.	**Compliance with SIP Emission Limits** The permittee shall demonstrate compliance with the emission limits using fuel records on a monthly basis.	18.5.3(a)
17.	**Requirements of to Avoid Applicability of 40 CFR 63, Subpart JJJJJJ** For each boiler, the permittee shall burn natural gas not combined with any solid fuels and burn No. 2 fuel oil only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.	63.11195(e) 63.11237
18.	**Recordkeeping & Reporting** The permittee shall maintain the following records specific to these units: A. Records of the quantity of each fuel combusted on a monthly or more frequent basis. B. Records of the monthly calculations of the 12-month rolling total of hours during which diesel was combusted in these boilers to show compliance with the 500 hour limit. C. Records of the quantity of hours each boiler is operated. D. Whenever No. 2 Fuel Oil is combusted, records of the duration (hours) and purpose of operation of each boiler to demonstrate that each boiler continues to be exempt from 40 CFR 63, Subpart JJJJJJ.	 18.5.3(b) Avoidance of NSR 18.5.3(b) 63.11195(e) 63.11237
	Boilers Permitted Under Group D	
	The affected facility includes the following boilers that combust only natural gas and are subject only to SIP rules (size in parentheses is in units of MMBtu/hr): 912 Building Boiler 1 (0.48) — 912 Building Boiler 2 (0.26) 936 BC/BS Boiler (2.5) — 936 BC/BS Water Heater (0.038) 9th Avenue Bldg. Boiler (0.32) — AIEVA 1 (0.546) AIEVA 2 (0.546) — BEC Boiler 1 (6.23) BEC Hot Water (0.726) — BEC Hot Water (2.1) Blazer Hall HW Boiler 2 (2.07) — Blazer Hall HW Boiler 1 (2.07) Blazer Hall HW Boiler 4 (2.07) — Blazer Hall HW Boiler 3 (2.07) Blount Hall HW Boiler 2 (2.07) — Blount Hall HW Boiler 1 (2.07) Blount Hall HW Boiler 4 (2.07) — Blount Hall HW Boiler 3 (2.07) Blount Hall HW Boiler 6 (2.07) — Blount Hall HW Boiler 5 (2.07) BMRH Water Heater 2 (1.23) — BMRH Water Heater 1 (1.23) Burleson HW Boiler (0.165) — Camp Hall Boiler 1 (0.922) Camp Hall Boiler 2 (0.922) — Camp Hall Boiler 3 (4.184) Camp Hall Boiler 4 (4.184) — Campbell Hall HW Boiler (2.1) CBSE HW Boiler 1 (1.203) — CBSE HW Boiler 2 (1.203) CBSE HW Boiler 3 (1.203) — CBSE HW Heater 1 (0.7)	

No.	Federally Enforceable Conditions for Boilers		Regulations
	CBSE HW Heater 2 (0.7)	CBSE HW Heater 3 (056)	
	CBSE HW Heater 4 (056)	CCB Boiler 1 (0.7125)	
	CCB Boiler 2 (0.7125)	CEC Water Heater (0.27)	
	CEC Boiler (0.012)	Central Plant #5 HW Boiler (0.999)	
	Central Support (2.049)	CH19 HW 1 (2.46)	
	CH19 HW 2 (0.25)	CH19 Domestic HW (1.08)	
	CH20 Boiler (2.88)	Chemistry Boiler 1 (1.29)	
	Chemistry Boiler 2 (1.29)	Chemistry Water Heater (0.399)	
	Denman Hall HW Boiler 1 (1.497)	Denman Hall HW Boiler 2 (1.497)	
	Denman Hall HW Boiler 3 (1.3)	FAB Bldg. Boiler (2.929)	
	Hoehn HW (2.307)	Humanities HW Boiler 2 (1.2)	
	Humanities HW Boiler 1 (1.2)	Hulsey Boiler (4.184)	
	McCallum Water Heater 1 (0.73)	McCallum Water Heater 2 (0.73)	
	NSRS 1 (3)	NSRS 2 (3)	
	NSRS 3 (3)	NSRS 4 (3)	
	Orthopedic Specialties Bldg. (0.5)	Rast Hall Supply HW Boiler (2.1)	
	Rast Hall HW Boiler 1 (1.467)	Rast Hall Supply HW Boiler 2 (1.173)	
	Ryals B1 (2.48)	Ryals B2 (1.76)	
	Ryals 6-1 (4.185)	SHPB Water Heater (0.7)	
	SHPB HW Boiler (2.8)	South Highlands (1.01)	
	SPAC Steam Boiler (0.866)	Sparks Boiler 1 (3.347)	
	Sparks Boiler 2 (3.347)	UAB Police HQ (0.2)	
	UAB Police HQ (1.85)	UBOB HW Boiler 1 (1)	
	UBOB HW Boiler 2 (1)	UBOB HW Boiler 3 (1)	
	UBOB HW Boiler 4 (1)	Ullman Bldg. Water Heater (3.2)	
	Ullman Bldg. Boiler 2 (1.409)	Ullman Bldg. Boiler 3 (1.409)	
	University Dining HW Boiler 1 (1.75)	University Dining HW Boiler 2 (1.75)	
	University Dining HW Boiler 3 (1.75)	University Dining Facility HW1 (0.5)	
	University Dining Facility HW2 (0.5)	Wallace Bell Boiler 2 (1.064	
	WBHM (0.283)	Women& Infant's Boiler 3 (0.006)	

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Boilers</th><th>Regulations</th></tr>
<tr><td>19.</td><td><u>Requirements Established by Prior Permits</u>
A. Natural gas shall be combusted as the only fuel.
B. The permittee shall not cause or allow the emissions from Group D boilers to exceed the following emission limits to be used in emissions calculations and shall conduct performance testing if required by the Department:

<table>
<tr><th>Pollutant /While Combusting</th><th>Natural Gas (lb/MMBtu)</th><th>EPA Test Method (40 CFR 60, Appendix A)</th></tr>
<tr><td>PM</td><td>0.003</td><td>Method 5</td></tr>
<tr><td>SO_2</td><td>0.0006</td><td>Method 6c</td></tr>
<tr><td>NO_X</td><td>0.095</td><td>Method 7E</td></tr>
<tr><td>CO</td><td>0.019</td><td>Method 10</td></tr>
<tr><td>VOC</td><td>0.005</td><td>Method 25A</td></tr>
<tr><td></td><td></td><td></td></tr>
</table></td><td>18.2.4
4-07-1044-02</td></tr>
<tr><td>20.</td><td><u>Emission Limitations from the State Implementation Plan (SIP)</u>
The permittee shall not cause or allow emissions from this emission unit in excess of the emission limits below:

<table>
<tr><th>Pollutant</th><th>Limit</th><th>Authority</th></tr>
<tr><td>Particulate Matter (PM)</td><td>$E = 1.38H^{-0.44}$, where E is emission rate (lb/MMBtu) and H is the heat input in MMBtu/hr

E shall not exceed 0.50 lb/MMBtu for units smaller than 10 MMBtu/hr</td><td>6.3.1
6.3.2</td></tr>
<tr><td>Opacity</td><td>20 % opacity (6-minute average), except for one 6-minute period per hour of not more than 40 % opacity</td><td>6.1.1</td></tr>
<tr><td>SO_2</td><td>E shall not exceed 1.80 lb/MMBtu</td><td></td></tr>
</table></td><td>6.3
6.1.1
7.1.1</td></tr>
<tr><td>21.</td><td><u>Compliance with SIP Emission Limits</u>
The permittee shall demonstrate compliance with the emission limits using fuel records on a monthly or more frequent basis.</td><td>18.5.3(a)</td></tr>
<tr><td>22.</td><td><u>Recordkeeping</u>
The permittee shall maintain the following records specific to these units:
A. Records of the quantity of each fuel combusted on a monthly or more frequent basis.
B. Records of the quantity of hours each boiler is operated.</td><td>18.5.3(b)</td></tr>
</table>

FEDERALLY ENFORCEABLE CONDITIONS FOR EMERGENCY GENERATORS

Emissions Unit No.	Group	Emissions Unit Description
002	A	Emergency Generator CI RICE Engines Subject to NSPS Subpart IIII
	B	Emergency Generator SI RICE Engines Subject to NSPS Subpart JJJJ
	C	Emergency Generator RICE Engines Subject only to SIP

No.	Federally Enforceable Conditions for Emergency Generators	Regulations
	Restrictions on Purpose and Hours of Operation	
1.	The permittee shall not operate any emergency generator for more than 500 hours per year, except that the 4 generators at the North Pavilion shall each be limited to 200 hours/year and the 2 generators at the Women and Infants Hospital shall each be limited to 250 hours/year. These limits are at the request of the permittee.	18.2.4
2.	In order for an engine to be considered an emergency stationary ICE under an NSPS or the NESHAP, any operation other than emergency operation shall comply with the following restrictions: A. Operation for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine is limited to a maximum of 100 hours per calendar year. B. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing described above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except as allowed for engines subject to NSPS at 40 CFR §60.4211(f)(3) or §60.4243(d)(3).	60.4211(f) 60.4243(d) 60.4248 63.6640(f) 18.2.4
	Applicability of NSPS and NESHAP	
3.	**Group A Engines Subject to 40 CFR 60, Subpart IIII** Compression ignition engines which are ordered by the permittee after July 11, 2005 are subject to Subpart IIII if they are manufactured after April 1, 2006 (or after July 1, 2006 for certified National Fire Protection Association (NFPA fire pump engines). CI engines which are modified or reconstructed by the permittee after July 11, 2005 are also subject to Subpart IIII. The engines which are known to be subject to NSPS are listed in Group A. Any CI engine which is purchased new or is modified or reconstructed during this permit term will also be subject to Subpart IIII.	60.4200(a)
4.	**Group B Engines Subject to 40 CFR 60, Subpart JJJJ** Spark ignition engines which are ordered by the permittee after January 1, 2009 are subject to Subpart JJJJ if they are manufactured on or after January 1, 2009. SI engines which are modified or reconstructed by the permittee after June 12, 2006 are also subject to Subpart JJJJ. The engines which are known to be subject to NSPS are listed in Group B. Any SI engine which is purchased new or is modified or reconstructed during this permit term will also be subject to Subpart JJJJ.	60.4230(a)

No.	Federally Enforceable Conditions for Emergency Generators	Regulations
5.	**Group C Engines Potentially Subject to NSPS or 40 CFR 63, Subpart ZZZZ**	63.6585(f)(3)
	A. Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate for the purpose specified in 40 CFR §63.6640(f)(4)(ii) are not subject to Subpart ZZZZ. For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006. *An engine constructed, modified or reconstructed before June 12, 2006 that participates in a financial arrangement with another entity to supply power in non-emergency situations is NOT exempt from NESHAP.*	63.6590(a)(iii)
	B. A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006. If a new engine is subject to NSPS, the permittee must meet the requirements of the NSPS and no further requirements under Subpart ZZZZ apply.	63.6590(a)(2)(iii) 63.6590(c)(1)
	C. A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in 40 CFR §63.2 and reconstruction is commenced on or after June 12, 2006. Any modified or reconstructed engine is subject to NSPS, and the permittee must meet the requirements of the NSPS and no further requirements under Subpart ZZZZ apply.	63.6590(a)(3)(iii) 63.6590(c)(1) 60.4205(f) 60.4230(a)(5)
	D. Units which are exempt from Subpart ZZZZ (Diesel unless otherwise noted): Administration Building – 74 hp Alys Stephens Center – 670 hp Bartow Arena – 99 hp BBRB Bevill 1 – 1,199 hp BMRII – 805 hp BBRB Bevill 2 – 1,199 hp Blazer Hall – 201 hp BEC – 16 hp Burleson – 27 hp (NG) Camp Hall – 248 hp Campbell Hall 1 – 107 hp Campbell Hall 2 – 73 hp Campus Rec Center – 321 hp CBSE Gen – 805 hp CBSE Fire Pump – 241 hp CCB 1 – 27 hp (NG) CCB 2 – 47 hp (NG) CCB 3 – 107 hp (NG) CH19 #1 – 47 hp (NG) CH19 #2 – 20 hp (NG) CH19 #3 – 107 hp (NG) Center for Psych. Med. – 600 hp Central Utilities #1 – 1,200 hp Central Utilities #3 – 107 hp Central Utilities #5 – 134 hp (NG) Denman Hall – 107 hp Facilities Admin Bldg. – 382 hp General Serv. Bldg. – 465 hp Kaul – 2,923 hp McCallum – 1,206 hp North Pavilion #1 – 2,172 hp North Pavilion #2 – 2,172 hp North Pavilion #3 – 2,172 hp North Pavilion #4 – 2,172 hp Parking Deck 4A – 27 hp Parking Deck #16 – 201 hp (NG) Parking Deck #7 (Ryals) – 201 hp (NG) Parking Deck 6 #1 – 820 hp 6th Ave Parking Deck #2 – 1,120 hp Quarterback Tower – 1,310 hp Rast Hall #1 – 27 hp (NG) Rast Hall #2 – 201 hp (NG) Research Support Building – 805 hp Russell Wing – 1,006 hp Rust – 805 hp Ryals – 750 hp School of Dentistry #1 – 1,005 School of Dentistry #2 – 335 Shelby – 2,682 hp SHP #2 – 182 hp SHP Fire Pump – 262 hp Spain Rehab – 166 hp Spain Rehab Rm 9 – 465 hp Spain Wallace #1 – 603 hp Spain Wallace #2 – 603 hp Sparks Center – 805 hp (NG) Tinsley Harrison Tower – 402 hp UBOB – 27 hp (NG) UAB Highlands #1 - 804.6 hp UAB Highlands #2 - 804.6 hp Volker Hall – 603 hp (NG) West Pavilion 1 – 900 hp West Pavilion 2 – 900 hp Zeigler Research Bldg – 207 hp	66 units

No.	Federally Enforceable Conditions for Emergency Generators	Regulations
	Emissions-Related Requirements for All Engines	
6.	**Opacity** The permittee shall not cause or allow the engine of any emergency generator listed in this permit to discharge particulate matter with an opacity greater than 20%, determined as a 6-minute average, except that during one 6-minute period in any 60-minute period, the permittee may discharge particulate of an opacity not greater than 40%. Opacity is determined using EPA Method 9 of 40 CFR 60, Appendix A.	6.1.1
7.	**Fuel Restrictions** The permittee shall combust only natural gas or diesel fuel in each engine, as appropriate to the design of the engine. Diesel fuel must meet the requirements for ULSD (Ultra Low Sulfur Diesel), including a maximum sulfur content of 15 ppm and either (1) minimum cetane index of 40 or (2) maximum aromatic content of 35 volume percent.	18.2.4 60.4207(b) 1090.305
	Additional Requirements for Group A Engines Subject to IIII	
8.	The following engines are subject to the NSPS 40 CFR 60, Subpart IIII: 936 BS/BS Bldg – 335 hp (2012) — AEIVA – 805 hp (2013) Blount Hall – 201 hp (2006) — Collat School of Bus – 134 hp (2018) EHS Support Facility – 57 hp (2012) — EHS Fire Pump – 107 hp (2012) Gold Hall – 1055.77 hp (2014) — Heritage Hall – 402 hp (2007) Highlands POB – 167 hp (2020) — Highlands OSB – 20 hp (2021) Hill Student Center – 670.5 hp (2015) — Lister Hall Fire Pump – 50 hp (2009) McMahon Hall – 1006 hp (2020) — Rust Comp. Room – 1,207 hp (2009) SEBLAB – 923 hp (2008) — 5th Ave. Parking Deck – 100 hp (2019) Steam Plant – 923 hp (2012) — Steam Plant – 923 hp (2012) UAB Police HQ – 134 hp (2018) — University Hall – 470 hp (2019) WIC #1 – 2,146 hp (2009) — WIC #2 – 2,146 hp (2009) Any CI engine which is purchased new or is modified or reconstructed during this permit term will also be subject to Subpart IIII on startup. A. The permittee must install a non-resettable hour meter prior to startup of the emergency engine. B. The permittee must operate and maintain each SI ICE such that each engines will achieve the emission standards over the entire life of the engine. C. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. D. If an engine is equipped with a diesel particulate filter, it must include a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached. E. Compliance with Subpart IIII emission limits for an engine that has been certified by the manufacturer must be installed and configured according to the manufacturer's emissions related specifications is as follows: 1. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; 2. Change only those emission-related settings that are permitted by the manufacturer; and	60.4205(a) 60.4205(b) 60.4205(c) 60.4205(f) 60.4209(a) 60.4206 60.4207(b) 60.4209(b) 60.4211(a) 60.4211(c)

No.	Federally Enforceable Conditions for Emergency Generators	Regulations
	3. Meet the requirements of 40 CFR part 1068, as they apply to you.	
	F. Compliance with Subpart IIII emission limits for engines not certified by the manufacturer because they were manufactured prior to the date after which certification is required is demonstrated using one of the options are 40 CFR §60.4211(b).	60.4211(b)
	G. Compliance with Subpart IIII emission limits for modified or reconstructed engines is demonstrated using one of the options are 40 CFR §60.4211(e).	60.4211(e)
	H. Compliance for engines that are not installed, configured operated and maintained according to the manufacturer's emission-related instructions, of if emission-related settings are changed in a way that is not permitted by the manufacturer, demonstrate compliance as follows:	60.4211(g)
	1. For CI with maximum engine power less than100 HP, keep a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year after you install and configure the engine and control device NOT according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer.	60.4211(g)(1)
	2. For CI engines greater than or equal to 100 HP and less than or equal to 500 HP, keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. 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.	60.4211(g)(2)
	3. For CI greater than 500 HP, keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. 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 changing emission-related settings in a way that is not permitted by the manufacturer. 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.	60.4211(g)(3)
	I. Performance testing must conform to the requirements of 40 CFR §60.4212.	60.4212
	Additional Emissions Requirements for Group B Engines Subject to JJJJ	
9.	The following engines are subject to the NSPS 40 CFR 60, Subpart JJJJ: 616 Building – 40 hp (2011) Remote Parking Lot 4 (34 hp) WBHM – 40 hp (2013) X Any SI engine which is purchased new or is modified or reconstructed during this permit term will also be subject to Subpart JJJJ on startup.	60.4230(a)(4)(iv) 60.4230(a)(5)

No.	Federally Enforceable Conditions for Emergency Generators	Regulations
	A. The permittee must install a non-resettable hour meter upon startup of the emergency engine.	60.4237(c)
	B. The permittee must operate and maintain each SI ICE such that each engines will achieve the emission standards over the entire life of the engine.	60.4234
	C. For an engine that has been voluntarily certified by the manufacturer to the Phase 1 emission standards in 40 CFR part 1054, appendix I, applicable to class II engines, for new nonroad SI engines in 40 CFR part 1054 per 40 CFR §60.4231(d), the permittee must demonstrate compliance according to one of the following methods:	60.4243(b)(1)
	1. If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.	60.4243 (a)(1)
	2. If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required.	60.4243 (a)(2)
	D. For an engine that has not been voluntarily certified by the manufacturer must meet the emission standards of Table 1 per 40 CFR §60.4233(d) and do the following: 10 g/HP-hr of NO_X + HC 387 g/HP-hr of CO	60.4233(d)
	1. 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.	60.4243(b)(2)
	2. Conduct an initial performance test according to the requirements of 40 CFR §60.4222 to demonstrate compliance.	
	E. For a non-certified engine or if you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing according to the requirements of §60.4222, but you are not required to conduct subsequent performance testing unless the stationary engine undergoes rebuild, major repair or maintenance. Engine rebuilding means to overhaul an engine or to otherwise perform extensive service on the engine (or on a portion of the engine or engine system). To perform extensive service means to disassemble the engine (or portion of the engine or engine system), inspect and/or replace many of the parts, and reassemble the engine (or portion of the engine or engine system) in such a manner that significantly increases the service life of the resultant engine.	60.4243(f)
	F. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.	60.4243(g)

No.	Federally Enforceable Conditions for Emergency Generators	Regulations
	Recordkeeping	
10.	The permittee shall maintain the following records for each engine: A. The date, duration and purpose of each operation of the engine as recorded by the non-resettable hour meter. These records need to be sufficient to demonstrate compliance with restrictions on the total hours of operation and the hours of non-emergency operation. B. The total hours operated by the engine shall be recorded during the first calendar week of each year. C. Records of maintenance and repairs sufficient to show compliance with the NSPS for engines that are subject to it. D. Test reports for any required performance test. E. Records of malfunctions, including the date, time, duration, probable cause and any corrective actions taken.	18.5.3(b) 18.7.1 63.1355
	F. **For Group A (CI) engines, the NSPS requires the following records**: 1. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 2. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.	60.4214(b) 60.4214(c)
	G. **For Group B (SI) engines, the NSPS requires the following records**: 1. All notifications submitted to comply with this subpart and all documentation supporting any notification. 2. Maintenance conducted on the engine. 3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable. 4. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non certified manner and subject to 40 CFR §60.4243(a)(2), documentation that the engine meets the emission standards. 5. If the engine does not meet the standards applicable to non-emergency engines, keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter, documenting how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.	60.4245(a) 60.4245(b)
	Reporting	
11.	**Submission of Performance Test Reports** Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in 40 CFR §60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference - see 40 CFR §60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.	60.4245(d)

No.	Federally Enforceable Conditions for Emergency Generators	Regulations
12.	**Annual Emissions Reporting** The permittee shall report the total annual hours of operation of each engine as the basis for emissions calculations. Manufacturer's emission guarantees may be used to calculate emissions where available. The type of fuel combusted in each engine must be included in the report, but the amount combusted for each engine is not needed if hours of operation are used to calculate emissions.	1.5.15 1.9.2 18.7.1 18.5.3

FEDERALLY ENFORCEABLE CONDITIONS FOR INCINERATORS

Emissions Unit No.	Emissions Unit Description	Control Device
003	Therm Tec G-16-P-1 Batch-Load Incinerator, capacity 200 lb waste/hr Located at OH&S Support Facility	(2) Afterburners, each 1.2 MMBtu/hr
	Matthews Crematory Incinerator Model IE43-PPI with PowerPak 1 (PLC), capacity 150 lb waste/hr Located at Volker Hall	1.2 MMBtu/hr Afterburner

No.	Federally Enforceable Conditions for Incinerators	Regulations
1.	The permittee shall not cause or allow the emissions of objectionable odor from the incinerators.	6.2.3 18.2.4
	Wastes Permitted to Be Charged to Each Incinerator	
2.	A. The Therm Tek Incinerator at OH&S Support Facility: The permittee is permitted to incinerate the following materials: 1. *Pathological waste*, defined as waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable). 2. *Low-level radioactive waste*, defined as waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable federal or State standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)). 3. *Chemotherapeutic waste*, defined as waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells. 4. *Hospital waste*, defined as discards generated at a hospital, except unused items returned to the manufacturer. 5. *Medical/infectious waste*, defined as any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals that are listed in paragraphs (1) through (7) of the definition of medical/infectious waste at 40 CFR §60.51c. This list is summarized: cultures and stocks of infectious agents and associated biologicals, pathological waste, blood and blood products, sharps, animal waste, and isolation wastes contaminated with blood, excretions, exudates, or secretions from humans or animals that are isolated to protect others from certain highly communicable diseases. 6. *Pharmaceutical materials*, including investigational drugs, confiscated drugs and paraphernalia, controlled substances, and unidentified non-hazardous pharmaceutical materials. B. The Crematory Incinerator Model IE43-PPI with PowerPak 1 at Volker Hall: The permittee shall incinerate only pathological waste, low-level radioactive waste and chemotherapeutic waste as defined above, and shall maintain records of the materials combusted on a calendar quarter basis. This condition will prevent this incinerator from being subject to the requirements 40 CFR 60, Subpart Ec.	60.51c 18.2.4 60.51c 60.50c(b)
3.	**Applicability of 40 CFR 60 Subpart Ec and Part 5.2** The NSPS requirements apply at all times when hospital waste and/or medical waste, as defined above, are combusted. The permittee shall maintain records on a calendar quarter basis of the periods of time when only pathological, low-level radioactive waste and/or chemotherapeutic waste is burned in order for those times to be exempt from the NSPS emission limits and other requirements at those times. The emission limits of Part 5.2 of the Rules and Regulations apply to each incinerator at all times.	60.50c(a)(3) 60.50c(b) 18.2.4 5.2

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Incinerators</th><th>Regulations</th></tr>
<tr><td></td><td>Emissions Limits from the SIP</td><td></td></tr>
<tr><td>4.</td><td><u>Requirements from Part 5.2</u>
A. Incinerators shall be designed and operated in such manner as is necessary to prevent the emission of objectionable odors.
B. The permittee shall not cause or allow the particulate matter in the exhaust gases to exceed 0.20 pounds per 100 pounds of materials charged. If required by the Department, performance testing shall be conducted in accordance with EPA Method 5 of 40 CFR 60, Appendix A and shall be conducted at the maximum burning capacity of the incinerator.</td><td>5.2.1

5.2.2
5.2.3</td></tr>
<tr><td>5.</td><td><u>Opacity</u>
The permittee shall not cause or allow the equipment listed above to discharge particulate matter with an opacity greater than 20%, determined as a 6-minute average, except that during one 6-minute period in any 60-minute period, the permittee may discharge particulate of an opacity not greater than 40%. Opacity is determined using EPA Method 9 of 40 CFR 60, Appendix A.</td><td>6.1.1</td></tr>
<tr><td></td><td>Additional Requirements for the Combustion of Hospital Waste and/or Medical/Infectious Waste from 40 CFR 60, Subpart Ec</td><td></td></tr>
<tr><td>6.</td><td><u>Emission Limits</u>
A. The emission limits of Subpart Ec apply at all times during the combustion of hospital and/or medical/infectious waste.
B. The permittee shall not cause or allow an incinerator that is combusting hospital waste and/or medical/infectious waste to discharge any gases that exhibit greater than 6% opacity. The permittee shall determine compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using EPA Method 9 of 40 CFR 60, Appendix A.
C. The permittee shall not cause or allow visible emissions discharged to the atmosphere from a building or other enclosure containing an ash conveying system in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Method 22 of 40 CFR 60, Appendix A.
D. The permittee shall not cause or allow an incinerator that is combusting hospital waste and/or medical/infectious waste to discharge any gases that contain stack emissions in excess of the following emission limits measured according to the EPA Reference Methods from 40 CFR 60, Appendix A and the requirements of 40 CFR §60.56c(b):
<table>
<tr><th>Pollutant</th><th>Limit on a 7% Oxygen, dry basis</th><th>Averaging Time</th><th>EPA Method</th></tr>
<tr><td>PM</td><td>66 mg/dscm (0.029 gr/dscf)</td><td rowspan="8">3-run average (1-hour minimum sample time per run)</td><td>5 or M 26A or 29</td></tr>
<tr><td>CO</td><td>20 ppmv</td><td>10 or 10B</td></tr>
<tr><td>HCl</td><td>15 ppmv</td><td>26 or 26A</td></tr>
<tr><td>SO_2</td><td>1.4 ppmv</td><td>6 or 6C</td></tr>
<tr><td>NO_X</td><td>67 ppmv</td><td>7 or 7E</td></tr>
<tr><td>Lead</td><td>0.31 mg/dscm (0.14 gr/10E3 dscf)</td><td>29</td></tr>
<tr><td>Cadmium</td><td>0.017 mg/dscm (0.0074 gr/10E3 dscf)</td><td>29</td></tr>
<tr><td>Mercury</td><td>0.014 mg/dscm (0.0061 gr/10E3 dscf)</td><td>29</td></tr>
<tr><td>Dioxans/ Furans</td><td>16 ng/dscm (7.0 gr/10E9 dscf) or 0.013 ng/dscm TEQ (0.0057 gr/10E9 dscf TEQ)</td><td>3-run average (4-hour minimum sample time per run)</td><td>23</td></tr>
</table></td><td>60.52c(a)
60.56c(a)
60.52c(b)(2)
60.52c(a)
60.56(c)(1)

60.52c(c)
60.52c(d)

60.52c(a)(2)
Table 1B of Subpart Ec</td></tr>
</table>

No.	Federally Enforceable Conditions for Incinerators	Regulations
7.	**Monitored Operating Parameter** The permittee shall install, calibrate (to manufacturers' specifications), maintain, and operate the equipment necessary to monitor the temperature of the final combustion chamber at all times when the incinerator is subject to Subpart Ec to ensure that the incinerator reaches and maintains or exceeds the operating temperature determined during a performance test in which all emission limits were met. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting hospital waste and/or medical/infectious waste. The afterburners and the temperature monitoring system shall be inspected annually (no more than 12 months following the previous inspection). Within 10 operating days following an air pollution control device inspection, all necessary repairs shall be completed unless the permittee obtains written approval from the Department establishing a date whereby all necessary repairs of the designated facility shall be completed.	60.52c(j) 60.57c(d) 60.57c(e) 60.57c(f) 60.57c(g)
8.	**Waste Management Plan** The permittee shall prepare and follow a waste management plan per 40 CFR §60.55c.	60.55c
9.	**HMIWI Operator Training and Qualifications** The permittee shall not allow the affected facility to incinerate hospital or medical/infectious waste and any time unless a fully trained and qualified HMIWI operator is accessible, either at the facility or available within 1 hour. To maintain qualification, the trained and qualified HMIWI operator shall complete and pass an annual review or refresher course of at least 4 hours. Applicable training and qualification requirements are located at 40 CFR §60.53c(a) through (g).	60.53c
10.	**Availability of Documentation for HMIWI Operators** The permittee shall maintain the following documentation at each facility in a location that is readily accessible to each HMIWI operator and shall establish a program for reviewing this documentation annually with each HMIWI operator: A. Summary of the applicable standards under Subpart Ec; B. Description of basic combustion theory applicable to an HMIWI; C. Procedures for receiving, handling, and charging waste; D. HMIWI startup, shutdown, and malfunction procedures; E. Procedures for maintaining proper combustion air supply levels; F. Procedures for operating the HMIWI and associated air pollution control systems within the standards established under Subpart Ec; G. Procedures for responding to periodic malfunction or conditions that may lead to malfunction; H. Procedures for monitoring HMIWI emissions; I. Reporting and recordkeeping procedures; and J. Procedures for handling ash.	60.53c(h) 60.53c(i) 60.53(j)
11.	**Inspection of Air Pollution Control Devices and Monitoring Equipment** A. The permittee shall conduct an initial inspection including the following, as a minimum: 1. Inspect air pollution control device(s) for proper operation, if applicable; 2. Ensure proper calibration of thermocouples, sorbent feed systems, and any other monitoring equipment; and 3. Generally observe that the equipment is maintained in good operating condition. B. Within 10 operating days following an air pollution control device inspection, all necessary repairs shall be completed unless the owner or operator obtains written approval from the Administrator establishing a date whereby all necessary repairs of the designated facility shall be completed. C. The permittee shall ensure that each HMIWI subject to the emissions limits under Subpart Ec undergoes an air pollution control device inspection annually (no more than 12 months following the previous annual air pollution control device inspection).	

No.	Federally Enforceable Conditions for Incinerators	Regulations
12.	**Compliance and Performance Testing** A. The permittee shall conduct an initial performance test for all pollutants with an emissions limit as required under 40 CFR §60.8 and §60.56c(b)(1) through (14). B. The permittee shall determine compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) consisting of (3) 1-hour test runs using EPA Method 9 of 40 CFR 60, Appendix A. C. For an ash conveying system, the permittee shall determine compliance with the visible emissions limits for fugitive emissions from flyash/bottom ash storage and handling by conducting a performance test using EPA Method 22 of 40 CFR 60, Appendix A on an annual basis (no more than 12 months following the previous performance test). D. Determine compliance with the PM, CO, and HCl emissions limits by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in 40 CFR §60.56c(b)(1)-(6), (10) and (12). If all three performance tests over a 3-year period indicate compliance with the emissions limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for the subsequent 2 years. At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emissions limit for a pollutant (PM, CO, or HCl), the owner or operator may forego a performance test for that pollutant for an additional 2 years. If any performance test indicates noncompliance with the respective emissions limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a 3-year period indicate compliance with the emissions limit. E. The permittee shall establish the maximum charge rate, the minimum secondary chamber temperature, and the minimum reagent flowrate as site specific operating parameters during the initial performance test to determine compliance with the emissions limits. Operating parameter limits do not apply during performance tests. Thereafter, the following requirements apply: 1. The permittee shall ensure that the affected facility does not operate above the maximum charge rate, or below the minimum secondary chamber temperature or the minimum reagent flow rate measured as 3-hour rolling averages (calculated each hour as the average of the previous 3 operating hours) at all times. 2. The operation of the affected facility above the maximum charge rate, below the minimum secondary chamber temperature, and below the minimum reagent flow rate simultaneously shall constitute a violation of the NO_X emissions limit, except that the permittee may conduct a repeat performance test using the identical operating parameters that indicated a violation to demonstrate that the affected facility is not in violation of the applicable emissions limit(s). 3. The permittee may repeat a performance test at any time to establish new values for the operating parameters. F. The permittee shall submit the following information no later than 60 days following the initial performance test. All reports shall be signed by the facilities manager. 1. The initial performance test data as recorded during the test; 2. The values for the site-specific operating parameters established during testing and a description, including sample calculations, of how the operating parameters were established during the initial performance test. 3. The waste management plan as specified in 40 CFR §60.55c.	60.56c 60.58c(c)

No.	Federally Enforceable Conditions for Incinerators	Regulations
	Recordkeeping (Each Incinerator)	
13.	The permittee shall maintain the following records for each incinerator for a minimum of 5 years:	60.58c(b)
	A. **Always required records**:	18.5.3(b)
	1. The permittee shall maintain records on a calendar quarter basis of the periods of time when only pathological, low-level radioactive waste and/or chemotherapeutic waste is burned in order for those times to be exempt from the NSPS emission limits and other requirements.	18.7.1 60.50c(b)
	2. Records of required monitoring that include, as applicable, the date, place (as defined in the permit), and time of all sampling or measurements; the date(s) analyses were performed; the company or entity that performed the analyses; the analytical techniques or methods used; the results of all analyses; and the operating conditions that existed at the time of sampling or measurement.	
	3. For each calendar days when an incinerator is operated, the date, times and duration of operations, the materials incinerated, any occurrence that is inconsistent with normal operating conditions and procedures or when monitoring is not performed as required, whether excess emissions may have resulted from the occurrence, the cause of the occurrence, and any corrective actions taken.	
	B. **For a unit subject to 40 CFR 60, Subpart Ec:**	60.58c(b)
	1. Calendar date for each record;	
	2. Records of the following data:	
	a. HMIWI charge dates, times, and weights and hourly charge rates;	
	b. Secondary chamber temperatures recorded during each minute of operation;	
	c. Records of opacity observations, including the method used, the date, time, results, and any corrective actions determined to be needed;	
	d. All operating parameter data collected; and	
	e. Records of the annual air pollution control device inspections, any required maintenance, and any repairs not completed within 10 days of an inspection or the timeframe established by the Administrator.	
	3. Identification of calendar days for which data on emission rates or operating parameters specified under Subpart Ec have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken.	
	4. Identification of calendar days, times and durations of malfunctions, a description of the malfunction and the corrective action taken.	
	5. Identification of calendar days for which data on emission rates or operating parameters specified under Subpart Ec exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken.	
	6. The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emissions limits and/or to establish or re-establish operating parameters, as applicable, and a description, including sample calculations, of how the operating parameters were established or re-established, if applicable.	
	7. Records showing the names of HMIWI operators who have completed review of the information in 40 CFR §60.53c(h) as required by §60.53c(i), including the date of the initial review and all subsequent annual reviews;	
	8. Records showing the names of the HMIWI operators who have completed the operator training requirements, including documentation of training and the dates of the training;	
	9. Records showing the names of the HMIWI operators who have met the criteria for qualification under 40 CFR §60.53c and the dates of their qualification; and	
	10. Records of calibration of any monitoring devices as required under 40 CFR §60.57c(a) through (d).	

No.	Federally Enforceable Conditions for Incinerators	Regulations
	Periodic Reporting (Each Incinerator)	
14.	**Semi-Annual Reporting** The following information shall be reported in the semi-annual Title V Compliance report: A. For each incinerator, a description of any deviations from permit requirements at each incinerator, or a statement that there were no deviations during the reporting period. The cause and corrective actions should be included in the report. B. The facility manager must sign the semiannual report that contains the following information as required by Subpart Ec: 1. Identification of calendar days for which data on emission rates or operating parameters specified under Subpart Ec have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken. 2. Identification of calendar days, times and durations of malfunctions, a description of the malfunction and the corrective action taken. 3. Identification of calendar days for which data on emission rates or operating parameters specified under Subpart Ec exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken.	18.5.3(c)(1) 60.58c(e) 60.58c(b)(3) 60.58c(b)(4) 60.58c(b)(5)
15.	**Annual Emissions Reporting** The permittee shall include the following information for the previous calendar year in the annual emissions report as the basis for emissions calculations: A. Quantity of waste subject to Subpart Ec charged to each incinerator (short tons); B. Quantity of waste NOT subject to Subpart Ec charged to each incinerator (short tons); C. The hours of operation each incinerator while combusting waste subject to Subpart Ec; and D. The hours of operation each incinerator while combusting waste NOT subject to Subpart Ec.	1.5.15 1.9.2 18.7.1 18.5.3
16.	**Annual Subpart Ec Report** The facility manager must sign the annual report that contains the following information as required by Subpart Ec: A. The values for the site-specific operating parameters, the highest and lowest values measured for each operating parameter for the reporting period; and the highest and lowest values measured for each operating parameter for the 3 previous 6-month reporting periods to provide a summary of performance over a 2-year period; B. Any information recorded under 40 CFR §60.58(b)(3) through (5), listed under Section B, Items 3 through 5, of the recordkeeping condition above for the reporting period and for the 3 previous 6-month reporting periods to provide a summary of performance over a 2-year period. C. If a performance test was conducted during the reporting period, the results of that test must be submitted to the Department. Additionally, the permittee may submit an electronic copy of stack test reports to EPA's WebFIRE database using the Electronic Reporting Tool. D. If no exceedances or malfunctions were reported for the period being reported, a statement that no exceedances occurred during the reporting period. E. Records of the annual air pollution control device inspection, any required maintenance, and any repairs not completed within 10 days of an inspection or the timeframe established by the Department.	60.58c(d) 60.58c(g)

FEDERALLY ENFORCEABLE CONDITIONS FOR GASOLINE DISPENSING

Emissions Unit No.	Emissions Unit Description
004	Gasoline Storage and Dispensing Including (2) 10,000-Gallon Underground Storage Tank for Gasoline and Stage I Vapor Controls

No.	Federally Enforceable Conditions for Gasoline Storage & Dispensing	Regulations
1.	**Requirements of 40 CFR 63, Subpart CCCCCC** The gasoline storage tank and associated equipment components in vapor or liquid gasoline service, including but not limited to pressure/vacuum vents on gasoline storage tank and the equipment necessary to unload product from cargo tanks into the storage tank, are subject to the following requirements:	63.11112(a) 63.11111(a) 63.11111(b) 63.11111(c)
	A. The permittee shall, 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.	63.11115(a)
	B. The permittee shall 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: 1. Minimize gasoline spills; 2. Clean up spills as expeditiously as practicable; 3. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and 4. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.	63.11116(a) 63.11117(a)
	C. The permittee shall only load gasoline into storage tanks by utilizing submerged filling. Submerged fill pipes must be no more than 6 inches from the bottom of the tank or the permittee shall maintain the liquid level in the tank above the entire opening of the fill pipe at all times.	63.11117(b)
	D. The permittee shall have records available within 24 hours of a request by the Administrator or department to document gasoline throughput.	63.11117(d)
2.	**State Implementation Plan Requirements**	
	A. The permittee shall not allow the transfer of gasoline from any gasoline tank truck into any storage tank unless the tank is equipped with a submerged fill pipe and the vapors displaced from the storage tank during filling are processed by a vapor control system as defined in Section 8.7.4.	8.7.3
	B. The permittee shall not permit the transfer of gasoline between the tank truck and the storage tank unless the vapor control system is connected and operating.	8.7.5(a)
	C. The permittee shall facilitate inspection of gasoline dispensing facilities by locating pressure/vacuum (P/V) vents such that they are visible for inspection from the ground and by providing ready access to underground storage tanks during times of inspection, including but not necessarily limited to unlocking gas caps or providing keys to the inspector.	8.7.5(e)
	D. The permittee shall not cause or allow gasoline to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation of the gasoline to the atmosphere.	8.7.6
	E. The permittee shall not disconnect an existing vapor balance system and shall maintain the system in proper working order even if the facility's average monthly throughput of gasoline decreases to less than 4,000 gallons.	8.7.7
	F. The permittee shall not allow gasoline tank truck to transfer gasoline into the gasoline storage tank permitted herein unless the tank truck has a valid Jefferson County Department of Health Air Sticker for the gasoline tank truck as required by 8.20.4.	8.20.3(b)

No.	Federally Enforceable Conditions for Gasoline Storage & Dispensing	Regulations
3.	**Recordkeeping** The permittee shall maintain the following records: A. The monthly throughput quantities of gasoline in gallons in each undrground storage tank; B. Records sufficient to demonstrate that each tank truck unloaded has a valid Jefferson County Department of Health Air Sticker; C. Time, date and volume of any gasoline spilled, including an estimate of the mass of gasoline evaporated to the atmosphere; and D. Records of the occurrence and duration of each malfunction of process air pollution control equipment, including the actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation.	1.9.1 18.5.3 8.7.5(b)
4.	**Annual Emissions Reporting** The permittee shall maintain the records required by Condition 3 above and include the following information for each generator in the annual emissions report as the basis for emissions calculations: A. The actual throughput in gallons for each gasoline storage tank for the previous calendar year; and B. If gasoline has spilled or been lost during a malfunction of control equipment, an estimate of the mass of gasoline evaporated to the atmosphere.	1.5.15 18.5.3 1.9.2 18.7.1

APPENDIX A: CROSS-REFERENCE TABLE: JCDH AIR POLLUTION CONTROL RULES AND REGULATIONS TO STATE IMPLEMENTATION PLAN

The citations to Alabama regulations provided below refer to the version of the regulation that has been approved by the U.S. EPA as part of Alabama's Clean Air Act state implementation plan (SIP), as identified in 40 CFR 52, Subpart B. In the event that there is a discrepancy between the information provided in the table below and the federal regulatory table identifying the Alabama SIP at 40 CFR 52, Subpart B, the federal regulatory table governs.

JCDH Citation	State Citation	Title/Subject
Chapter 1	**Chapter No. 335-3-1**	**General Provisions**
Part 1.1	Section 335-3-1-.01	Purpose
Part 1.3	Section 335-3-1-.02	Definitions
Part 1.7	Section 335-3-1-.03	Ambient Air Quality Standards
Part 1.9	Section 335-3-1-.04	Monitoring, Records, and Reporting
Part 1.10	Section 335-3-1-.05	Sampling and Test Methods
Part 1.11	Section 335-3-1-.06	Compliance Schedule
Part 1.12	Section 335-3-1-.07	Maintenance and Malfunctioning of Equipment; Reporting
Part 1.13	Section 335-3-1-.08	Prohibition of Air Pollution
Sections 3.2.1 – 3.2.4 & Part 3.4	Section 335-3-1-.09	Variances
Part 1.15	Section 335-3-1-.10	Circumvention
Part 1.16	Section 335-3-1-.11	Severability
Part 1.17	Section 335-3-1-.12	Bubble Provision
Part 1.18	Section 335-3-1-.13	Credible Evidence
Part 1.20	Section 335-3-1-.15	Emissions Inventory Reporting Requirements
Chapter 2	**Chapter No. 335-3-14**	**Air Permits**
Part 2.1	Section 335-3-14-.01	General Provisions
Part 2.2, except 2.2.4(h)	Section 335-3-14-.02	Permit Procedures
Part 2.3	Section 335-3-14-.03	Standards for Granting Permits
Part 2.4	Section 335-3-14-.04[1],[2],[3]	Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration (PSD)]
Part 2.5	Section 335-3-14-.05[4]	Air Permits Authorizing Construction in or Near Nonattainment Areas
Chapter 4	**Chapter No. 335-3-2**	**Air Pollution Emergency**
Part 4.1	Section 335-3-2-.01	Air Pollution Emergency
Part 4.3	Section 335-3-2-.02	Episode Criteria
Part 4.4	Section 335-3-2-.03	Special Episode Criteria
Part 4.5	Section 335-3-2-.04	Emission Reduction Plans
Part 4.6	Section 335-3-2-.05	Two Contaminant Episode
Part 4.7	Section 335-3-2-.06	General Episodes
Part 4.8	Section 335-3-2-.07	Local Episodes
Part 4.9	Section 335-3-2-.08	Other Sources
Section 4.2.3	Section 335-3-2-.09	Other Authority Not Affected

[1] EPA approval does not include the changes to 335-3-14-.04(2)(w)1., state effective July 11, 2006, which lists a 100 ton per year significant net emissions increase for regulated NSR pollutants not otherwise specified at 335-3-14-.04(2)(w).

[2] EPA approval does not include the significant impact levels at 335-3-14-.04(10)(b) which were withdrawn from EPA consideration on October 9, 2014.

[3] EPA approval does not include the second sentence of paragraph 335-3-14-.04(2)(bbb)2., as well as the second and fourth sentences of paragraph 335-3-14-.04(2)(bbb)3., which include changes from the vacated federal ERP rule and were withdrawn from EPA consideration by the State on May 5, 2017.

[4] EPA approval does not include the portion of 335-3-14-.05(1)(k) stating "excluding ethanol production facilities that produce ethanol by natural fermentation"; and 335-3-14-.05(2)(c)3 (addressing fugitive emission increases and decreases). Also with the exception of the state-withdrawn elements: 335-3-14-.05(1)(h) (the actual-to-potential test for projects that only involve existing emissions units); the last sentence at 335-3-14-.05(3)(g), stating "Interpollutant offsets shall be determined based upon the following ratios"; and the NNSR interpollutant ratios at 335-3-14-.05(3)(g)1-4.

JCDH Citation	State Citation	Title/Subject
Chapter 5	**Chapter No. 335-3-3**	**Control of Open Burning and Incineration**
Sections 5.1.1 – 5.1.5[1]	Section 335-3-3-.01	Open Burning
Part 5.2	Section 335-3-3-.02	Incinerators
Part 5.3[2], except 5.3.4	Section 335-3-3-.03	Incineration of Wood, Peanut, and Cotton Ginning Waste
Chapter 6	**Chapter No. 335-3-4**	**Control of Particulate Emissions**
Sections 6.1.1 & 6.1.2	Section 335-3-4-.01	Visible Emissions
Part 6.2	Section 335-3-4-.02[3]	Fugitive Dust and Fugitive Emissions
Part 6.3	Section 335-3-4-.03	Fuel Burning Equipment
Part 6.4	Section 335-3-4-.04	Process Industries—General
Part 6.5[4]	Section 335-3-4-.05	Small Foundry Cupola
Part 6.6	Section 335-3-4-.06	Cotton Gins
Part 6.7	Section 335-3-4-.07	Kraft Pulp Mills
Part 6.8	Section 335-3-4-.08	Wood Waste Boilers
Part 6.9	Section 335-3-4-.09	Coke Ovens
No equivalent provision	Section 335-3-4-.10	Primary Aluminum Plants
Part 6.10	Section 335-3-4-.11	Cement Plants
Part 6.12	Section 335-3-4-.12	Xylene Oxidation Process
No equivalent provision	Section 335-3-4-.13	Sintering Plants
No equivalent provision	Section 335-3-4-.14	Grain Elevators
No equivalent provision	Section 335-3-4-.15	Secondary Lead Smelters
Chapter 7	**Chapter No. 335-3-5**	**Control of Sulfur Compound Emissions**
Part 7.1	Section 335-3-5-.01	Fuel Combustions
Part 7.2 is not equivalent	Section 335-3-5-.02	Sulfuric Acid Plants
No equivalent provision	Section 335-3-5-.03	Petroleum Production
No equivalent provision	Section 335-3-5-.04	Kraft Pulp Mills
No equivalent provision	Section 335-3-5-.05	Process Industries—General
Parts 7.6 through 7.36	Sections 335-3-5-.06 through 335-3-5-.36	TR SO_2 Trading Program.
Chapter 8	**Chapter No. 335-3-6**	**Control of Volatile Organic Compound (VOC) Emissions**
Part 8.1[5]	Section 335-3-6-.24	Applicability
Part 8.2	Section 335-3-6-.25	VOC Water Separation
Part 8.3	Section 335-3-6-.26[6]	Loading and Storage of VOC
Part 8.4	Section 335-3-6-.27	Fixed-Roof Petroleum Liquid Storage Vessels
Part 8.5	Section 335-3-6-.28	Bulk Gasoline Plants
Part 8.6	Section 335-3-6-.29	Gasoline Terminals
Part 8.7, except 8.7.4(b) & 8.7.5(e)	Section 335-3-6-.30	Gasoline Dispensing Facilities Stage 1
No equivalent provision	Section 335-3-6-.31	Petroleum Refinery Sources
Part 8.11	Section 335-3-6-.32	Surface Coating
Part 8.12	Section 335-3-6-.33	Solvent Metal Cleaning
Part 8.13	Section 335-3-6-.34	Cutback and Emulsified Asphalt
Part 8.15	Section 335-3-6-.36	Compliances Schedules

[1] See also Guidelines & Standard Operating Procedures for Issuance of Open Burning Authorizations at the end of Chapter 5. ADEM 335-3-3-.01(2)(b)(6) also prohibits open burning during declared air stagnation advisories and drought emergencies.

[2] JCDH has no equivalent for ADEM 335-3-3-.03(5), which states "Each incinerator subject to this Rule shall be properly designed, equipped, and maintained for its maximum rated burning capacity and shall be equipped with an underfire forced air system, an over-fire air recirculation secondary construction system, and variable control damper, all of which shall be electronically controlled to insure the optimum temperature range for the complete combustion of the amount and type of material waste being charged into the incinerator. Each such incinerator shall be equipped with a temperature recorder which shall be operated continuously with the incinerator, and the temperature records shall be made available for inspection at the request of the Director."

[3] EPA approved the version of 335-3-4-.02 that became effective on November 21, 1996. Subsequent changes are not approved SIP provisions.

[4] All allowable emissions rates in Table 6-3 should be construed to have 2 significant figures, consistent with ADEM 335-3-4-.05, Table 4-3.

[5] The definition at ADEM 335-3-6-.24(2)(d) is located at JCDH Part 1.3.

[6] EPA approved the version of 335-3-6-.26 that became effective on June 9, 1987. Subsequent changes are not approved SIP provisions.

JCDH Citation	State Citation	Title/Subject
Part 8.16[1]	Section 335-3-6-.37	Test Methods and Procedures
Part 8.18	Section 335-3-6-.39	Manufacture of Synthesized Pharmaceutical Products
Part 8.20, except 8.20.8	Section 335-3-6-.41	Leaks from Gasoline Tank Trucks and Vapor Collection Systems
No equivalent provision	Section 335-3-6-.42[2]	Leaks from Petroleum Refinery Equipment
Part 8.22	Section 335-3-6-.43	Graphic Arts
Part 8.23	Section 335-3-6-.44	Petroleum Liquid Storage in External Floating Roof Tanks
Part 8.24	Section 335-3-6-.45	Large Petroleum Dry Cleaners
Part 8.26	Section 335-3-6-.47	Leaks from Coke by-Product Recovery Plant Equipment
Part 8.27	Section 335-3-6-.48	Emissions from Coke by-Product Recovery Plant Coke Oven Gas Bleeder
Part 8.28	Section 335-3-6-.49	Manufacture of Laminated Countertops
Part 8.29	Section 335-3-6-.50	Paint Manufacture
Part 8.23[3]	Section 335-3-6-.53	List of EPA Approved and Equivalent Test Methods and Procedures for the Purpose of Determining VOC Emissions
Chapter 9	**Chapter No. 335-3-7**	**Control of Carbon Monoxide Emissions**
Part 9.1	Section 335-3-7-.01	Metals Productions
Part 9.2	Section 335-3-7-.02	Petroleum Processes
Chapter 10	**Chapter No. 335-3-8**	**Control of Nitrogen Oxides Emissions**
Part 10.1	Section 335-3-8-.01	Standards for Portland Cement Kilns
Part 10.2	Section 335-3-8-.02	Nitric Acid Manufacturing
Part 10.3	Section 335-3-8-.03	NO_X Emissions from Electric Utility Generating Units
Part 10.4	Section 335-3-8-.04	Standards for Stationary Reciprocating Internal Combustion Engines
Part 10.5	Section 335-3-8-.05	New Combustion Sources
Parts 10.7 through 10.38	Sections 335-3-8-.07 through 335-3-8-.38	TR NO_X Annual Trading Program
Part 10.39 through 10.70	Sections 335-3-8-.39 through 335-3-8-70	TR NO_X Ozone Season Group 2 Trading Program
No equivalent provision	Section 335-3-8-.71	NO_X Budget Program
No equivalent provision	Section 335-3-8-.72[4]	NO_X Budget Program Monitoring and Reporting
Chapter 11	**Chapter No. 335-3-9**	**Control of Emissions from Motor Vehicles**
Part 11.1	Section 335-3-9-.01	Visible Emission Restriction for Motor Vehicles
Part 11.2	Section 335-3-9-.02	Ignition System and Engine Speed
Part 11.3	Section 335-3-9-.03	Crankcase Ventilation Systems
Part 11.4	Section 335-3-9-.04	Exhaust Emission Control Systems
Part 11.5	Section 335-3-9-.05	Evaporative Loss Control Systems
Part 11.6	Section 335-3-9-.06	Other Prohibited Acts
Part 11.7	Section 335-3-9-.07	Effective Date
Chapter 17	**Chapter No. 335-3-15**	**Synthetic Minor Operating Permits**
Part 17.1	Section 335-3-15-.01[5]	Definitions
Part 17.2, except 17.2.8(h)(7)	Section 335-3-15-.02	General Provisions
Part 17.3	Section 335-3-15-.03	Applicability

[1] Federally enforceable testing provisions for perchloroethylene dry cleaning systems are located at ADEM 335-3-6-.37(5) and federally enforceable testing provisions for capture efficiency are located at ADEM 335-3-6-.37(13).

[2] Removed and reserved. SIP approval remains in effect.

[3] Test Methods 204, 204A-204F are not included in the APR-approved SIP.

[4] EPA conditionally approved Rule 335-3-8-.72, NOX Budget Program Monitoring and Reporting, submitted by Alabama on February 27, 2020, into the Alabama SIP on July 7, 2021. This conditional approval is based on Alabama's September 15, 2020, commitment to the EPA to correct, within one year of the conditional approval, the stack testing requirement, which was added to Rule 335-3-8-.72(1)(c) in error. If Alabama fails to meet its commitment by July 7, 2022, the conditional approval will become a disapproval on July 7, 2022 and EPA will issue a notification to that effect.

[5] EPA approved the version of 335-3-15-.01 that became effective on November 21, 1996. Subsequent changes are not approved SIP provisions.

JCDH Citation	State Citation	Title/Subject
Part 17.4[1]	Section 335-3-15-.04	Synthetic Minor Operating Permit Requirements
Part 17.5, except 17.5.2	Section 335-3-15-.05	Public Participation
Chapter 19	**Chapter No. 335-3-17**	**Conformity of Federal Actions to State Implementation Plans**
Part 19.1	Section 335-3-17.01	Transportation Conformity
Part 19.2	Section 335-3-17-.02	General Conformity

[1] JCDH Part 17.4 does not include the federally enforceable provisions of ADEM 335-3-15-.04(1)(g) and (3)(c).