

JEFFERSON COUNTY DEPARTMENT OF HEALTH

AIR POLLUTION PROGRAM

Permittee: The University of Alabama at Birmingham

Location: 1720 2nd Avenue South
Birmingham, Alabama 35294

Permit No: 4-07-1044-02

Issuance Date: May 12, 2017

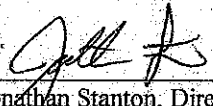
Expiration Date: May 11, 2022

Nature of Business: Educational Institution

Emissions Unit Nos.	Emissions Unit Description
001	<u>Boilers and Water Heaters/Boilers</u> Group A, Boilers Group B, Boilers Group C, Water Heaters/Water Heater Boilers
002	<u>Emergency Generators</u> Group A, Emergency generators Group B, Emergency generators
003	Incinerators
004	Gasoline Dispensing Facilities and Underground Storage Tanks
005	Hospital Ethylene Oxide Sterilization Unit

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 applications 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 citizen 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 citizen 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 E. Wilson, M.D.
Health Officer



General Permit Conditions

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, serves as origin and authority for the associated permit terms or condition.

	Federally Enforceable Conditions	Regulations
1.	<p><u>Basis for Permit</u></p> <p>This 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 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") to comply with such new Rules and Regulations. Additions and revisions to the conditions in this 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.</p>	AL Act 769
2.	<p><u>Authority</u></p> <p>Nothing in this permit or conditions appended thereto shall negate any authority granted to this Department or the Health Officer pursuant to Act No. 769 (Regular Session, 1971) and Act No. 612 (Regular Session, 1982) or any regulations promulgated thereunder.</p>	AL Act 769
3.	<p><u>Emission Reduction Plan</u></p> <p>Upon notification by this Department, the permittee shall submit an Air Pollution Emission Reduction Plan in a format approved by this Department concerning air contaminants emissions reductions to be taken during declared episodes.</p>	18.2.8(b)
4.	<p><u>Bypass Prohibited</u></p> <p>Except as 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.</p>	18.2.8(a)
5.	<p><u>Transfer</u></p> <p>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.</p>	18.2.6
6.	<p><u>Shutdown of Controls</u></p> <p>In the case of shutdown of air pollution control equipment for scheduled maintenance for a period greater than 24 hours, the intent to shutdown shall be reported to this Department at least 24 hours prior to the planned shutdown in accordance with the requirements of Section 1.12.1 of the Rules and Regulations.</p>	1.12.1

7.	<p><u>Testing</u></p> <p>A source emissions test may be required by this Department at any time. The methods for such testing shall be in accordance with procedures established by Part 60 of Title 40 of the <u>Code of Federal Regulations</u>, (hereinafter, called 40 CFR 60).</p>	1.9.1 18.5.3(a)(1)
8.	<p><u>Notice of Testing</u></p> <p>The permittee shall notify this Department in writing at least 2 weeks prior to the actual conduction of any required source emissions compliance test. This notice shall state the source to be tested, the proposed time of the test, and the testing date(s).</p>	1.9.1
9.	<p><u>Provisions for Testing</u></p> <p>The permittee shall provide each point of emission required to be tested with sampling ports, ladders, stationary platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the <u>Code of Federal Regulations</u> (hereinafter, called 40 CFR 60).</p>	18.2.8(c) 1.10.3
10.	<p><u>Test Results</u></p> <p>The permittee shall submit the results of all required emissions tests in duplicate in bound copies to this Department within a time period specified by this Department; however, not to exceed 3 weeks from the test completion date.</p>	18.2.8(c) 1.10.4
11.	<p><u>Maintenance of Controls</u></p> <p>A. The permittee shall equip each fabric filter particulate matter control device with a pressure differential measuring device to measure pressure drop across the filter media in the control device. This device shall be installed in a location which is easily accessible for inspection by personnel of this Department.</p> <p>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 emission of air contaminants shall be maintained near the source and provided to the Department upon request.</p> <p>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 in a format approved by this Department and shall be retained for at least 5 years.</p>	18.2.8(a)
12.	<p><u>Fugitive Dust</u></p> <p>The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not limited to, the following:</p> <p>(A) Use, where possible, of water or chemicals for control of dust in the demolition of existing building or structures, construction operations, the grading of roads or clearing of land;</p> <p>(B) Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stock piles, and other surfaces which create airborne dust problems; and</p> <p>(C) Installation and use of hoods, fans, and fabric filters (or other suitable control devices) to enclose and vent the handling of dust materials. Adequate containment methods shall be employed during sand blasting or other similar operations.</p>	18.2.8(a) 6.2.1

	<p>(D) No person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate</p> <p>(E) When dust, fumes, gases, mist, odorous matter, vapor, or any combination thereof escape from a building or equipment in such a manner and amount as to cause 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 gases-borne materials leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.</p>	<p>6.2.2</p> <p>6.2.3</p>
13.	<p><u>Record keeping and Monitoring</u></p> <p>The permittee shall comply with all record keeping and monitoring requirements required in all applicable federal and local regulations.</p>	18.2.3
14.	<p><u>Monitoring Records</u></p> <p>Records of all required monitoring shall be retained for a period of 5 years from the date of measurement including all calibration and maintenance records and all original recordings and copies of all reports.</p>	18.5.3(b)(1) (vii)
15.	<p><u>Monitoring Reports</u></p> <p>Reports of required monitoring shall be submitted to the Department as specified in the conditions for each emission unit. All instances of deviations from permit requirements must be clearly identified in such reports. All reports must be signed by a responsible official as defined in the Rules and Regulations.</p>	18.5.3(c)(1)
16.	<p><u>Deviations</u></p> <p>Deviations from permit requirements shall be reported within 2 working days of deviation, including those attributable to upset conditions; the report shall include the probable cause of said deviations and any corrective actions or preventive measures that were taken.</p>	18.5.3(c)(2)
17.	<p><u>Severability</u></p> <p>In case of legal challenge to any portion of this permit, the remainder of the permit conditions shall continue to be enforced.</p>	18.5.5
18.	<p><u>Compliance</u></p> <p>The permittee shall comply with all conditions of the Rules and Regulations. Noncompliance with a permit will constitute a violation of the Act 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.</p>	18.5.6
19.	<p><u>Compliance Defense</u></p> <p>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.</p>	18.5.7
20.	<p><u>Termination for Cause</u></p> <p>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.</p>	18.5.8

21.	<u>Property Rights</u> No property rights of any sort or any exclusive privilege are conveyed through the issuance of this permit.	18.5.9
22.	<u>Requests for Information</u> 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 with the permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by the permit.	18.5.10
23.	<u>Fees</u> The permittee shall have paid all fees including emission fees required by the Rules and Regulations or the permit is not valid.	18.5.11
24.	<u>Economic Incentives</u> 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 permit.	18.5.12
25.	<u>Alternative Operating Scenarios</u> With respect to any alternative operating scenarios included in this permit, the permittee shall: A. Record the change from one operating scenario to another in a log at the permitted facility. The recording of the change shall be made contemporaneously with the change, and the log shall contain the scenario under which the facility is currently operating. B. Ensure that terms and conditions of each alternative operating scenario meets all of the requirements of this permit, as well as, the Rules and Regulations.	18.5.13
26.	<u>Compliance Certification</u> A compliance certification shall be submitted annually within 30 days of the anniversary of the initial issue date. The permittee shall provide a means for assuring the compliance of its air pollution sources with the emissions limitations, standards and work practices listed or referenced within this permit. A. The compliance certification shall include the following: 1. The identification of each term or condition of this permit that is the basis of the certification; 2. The compliance status; 3. Whether compliance has been continuous or intermittent; 4. The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with this permit and the Rules and Regulations; and 5. Such other facts as the Department may require to determine the compliance status of the source.	18.7.1 18.7.5(c) 18.7.5(d) 18.7.5(e) 18.4.9

	<p>B. The compliance certification shall be submitted to:</p> <p style="text-align: center;">Jefferson County Department of Health Air and Radiation Protection Division P.O. Box 2648 Birmingham, Alabama 35202-2648</p> <p style="text-align: center;">and to</p> <p style="text-align: center;">EPA Region IV Air & EPCRA Enforcement Branch 61 Forsyth Street Atlanta, GA 30303</p>	
27.	<p><u>Reopening for Cause</u></p> <p>Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:</p> <p>A. Additional applicable requirements under the Clean Air Act of 1990 (hereinafter the "Act") become applicable to the permittee with a remaining permit term of 3 or more years. Such a reopening shall be completed not 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 of which this permit is due to expire.</p> <p>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.</p> <p>C. The Department 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.</p> <p>D. The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.</p>	18.13.5
28.	<p><u>Changes</u></p> <p>Certain changes (per Section 502 (B)(10) of the Act) can be made to this 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 a notice is sent to the Department 7 working days in advance of the change.</p>	18.13.2
29.	<p><u>Emergency Provision</u></p> <p>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 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.</p> <p>B. Exceedances of emission limits during emergencies (as defined above) at a facility may be exempted from being violations provided that:</p> <ol style="list-style-type: none"> 1. The permittee can identify the cause(s) of the emergency; 2. At the time of the emergency, the permitted facility was being properly operated; 	18.11.2

	<p>3. 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;</p> <p>4. 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. Such notice shall include 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. Within 5 working days of the emergency, a written documentation of what was reported in the notice of the emergency shall be submitted to the Department; and</p> <p>5. 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.</p> <p>C. The Health Officer shall be the sole determiner of whether an emergency has occurred.</p> <p>D. This provision is in addition to any emergency or upset provision contained in any applicable requirement.</p>	
30.	<p><u>Nothing in this Operating Permit shall alter or affect the following:</u></p> <p>A. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;</p> <p>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;</p> <p>C. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act; or</p> <p>D. The ability of EPA to obtain information from a source pursuant to Section 114 of the Act.</p>	18.10.3
31.	<p><u>Expiration</u></p> <p>A source's or permittee's right to operate shall terminate upon the expiration of this 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.</p>	18.12.2(b) 18.4.3 18.5.2
32.	<p><u>Minor Permit Modifications</u></p> <p>Minor permit modification procedures may be used only for those permit modifications that:</p> <p>A. Do not violate any applicable requirement;</p> <p>B. Do not involve significant changes to existing monitoring, reporting, or record keeping requirements in the permit;</p> <p>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;</p> <p>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:</p>	18.13.3

	<p>1. A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of title I of the Act; and</p> <p>2. An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Act;</p> <p>E. Are not modifications under any provision of title I of the Act; and</p> <p>F. Are not required by Part 18.13.4 to be processed as a significant modification.</p>	
33.	<p><u>Availability of Permit</u></p> <p>The permittee shall keep this 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.</p>	18.2.2
34.	<p><u>Acceptance of Permit</u></p> <p>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. An 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.</p>	18.2.4
35.	<p><u>Construction Not In Accordance with Applications</u></p> <p>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 permit shall be revoked. No further application for an Operating Permit shall be accepted until the source has been reconstructed in accordance with the permit or until the permittee has proven to the Department that the change will not cause an increase in the emission of air contaminants.</p>	18.2.8(e)
36.	<p><u>Revocation</u></p> <p>This Operating Permit may be revoked for any of the following reasons:</p> <p>A. Failure to comply with any conditions of the permit;</p> <p>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 Regulations;</p> <p>C. Failure to comply with any provisions of any Department administrative order issued concerning the permitted facility;</p> <p>D. Failure to comply with the Rules and Regulations; or</p> <p>E. 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 these Rules and Regulations.</p>	18.2.9
37.	<p><u>Additional Information</u></p> <p>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.</p>	18.4.7

38.	<p><u>Significant Modifications</u></p> <p>Modifications that are significant modifications under the PSD (Part 2.4) or nonattainment (Part 2.5) regulations or are modifications under the NSPS or NESHAPS regulations shall 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 18.14 of the Rules and Regulations.</p>	18.13.4
39.	<p><u>Schedule of Compliance</u></p> <p>A. The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.</p> <p>B. The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.</p>	18.7.3
40.	<p><u>Progress Reports</u></p> <p>If any air pollution source owned or operated by the permittee is not in compliance with the emissions limitations, standards and work practices listed or referenced within this permit, the permittee shall submit a progress report for that air pollution source. Except in the case of a compliance schedule existing or under negotiation on the date of issuance of this permit the first schedule of compliance shall be submitted within 3 months after the Operating Permit issuance date or within 3 months of the permittee or Department determining that the air pollution source is not in compliance. Subsequent reports shall be submitted every 6 months following the initial report. The progress reports shall contain the following:</p> <p>A. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and/or dates when such activities, milestones or compliance were achieved; and</p> <p>B. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.</p>	18.7.4
41.	<p><u>Obnoxious Odors</u></p> <p>This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by the Department inspectors, measures to abate the odorous emissions shall be taken upon a determination by this Department that these measures are technically and economically feasible.</p>	6.2.3
42.	<p><u>New Air Pollution Sources</u></p> <p>A new permit application shall 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.</p>	2.1
43.	<p><u>MACT Standard</u></p> <p>The permittee shall be subject to any or all future applicable Federal Maximum Achievable Control Technology (MACT) Standards immediately from the date of promulgation by EPA, of the standards.</p>	18.2.3
44.	<p><u>Prevention of Accidental Releases</u></p> <p>The permittee shall comply with the applicable requirements of Section 112 (r) of the Act to prevent accidental releases and to minimize the consequences any such release of any substance listed pursuant to Paragraph (3) of Section 112 (r), as the same may be amended or revised, or any other extremely hazardous substance.</p>	18.2.3

45.	<p><u>Title VI Requirements (Refrigerants)</u></p> <p>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 <u>CFR</u> 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 <u>CFR</u> 82, Subpart F.</p> <p>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 <u>CFR</u> 82, Subpart E.</p> <p>B. The responsible official shall comply with all reporting and recordkeeping requirements of 40 <u>CFR</u> 82.166. Reports shall be submitted to the U.S. EPA and the Department as required.</p>	<p>40 CFR 82 18.1.1(e)(10) 18.1.1(w)(4)</p>
46.	<p><u>Asbestos</u></p> <p>Demolition and renovation activities at this facility are subject to the National Emission Standard for Asbestos, 40 <u>CFR</u> 61, and 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 non-friable 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.</p>	<p>40 CFR 61 14.2.12 14.2.12(a)(1)</p>
47.	<p><u>Annual Emissions Calculations</u></p> <p>The permittee shall make calculations of the previous year's actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations that emanate from the facility. These calculations shall include, but are not limited to the following pollutants: TSP, PM₁₀, PM_{2.5}, SO₂, NO_x, CO, VOCs, and HAPs. These calculations shall indicate the emissions from each emissions unit permitted, and shall include the fugitive emissions from on-site vehicular traffic and the combustion of all motor fuels (diesel, gasoline, and natural gas). These calculations shall be submitted to the Department by February 10th each year. Concurrence with the calculations by the Department shall be the basis for determining the annual emissions fees.</p>	<p>18.2.3</p>
48.	<p>All previous permits issued to this facility shall expire immediately after the issuance of this permit. The permittee shall return all expired permits to this Department as soon as possible.</p>	<p>18.2.3</p>

<u>Facility</u> <u>No.</u>	<u>Emissions</u> <u>Unit No.</u>	<u>Emissions Unit Description</u>
1044	001	Boilers and Hot Water Heaters/Boilers

Permit Conditions for Emissions Unit No. 001

<u>Group A Boilers</u>		
<u>Boilers permitted under Group A</u>		
<p>Boilers:</p> <p>Natural Gas and Fuel Oil Fired Boilers:</p> <p><u>Group A Boilers</u></p> <p><u>Capacities between 10 MMBtu/hr and 100 MMBtu/hr and constructed after June 9, 1989</u></p> <ol style="list-style-type: none"> 1. 4- 99 MMBtu/hr Natural Gas/Fuel Oil Fired Steam Plant Boilers w/Low NOx burners at Steam Plant (The boilers are subject to Subpart Dc of 40 CFR 60.) 2. 2- 32.659 MMBtu/hr Natural Gas/Fuel Oil Fired Boilers w/Low NOx burners at Women & Infant Center (The boilers are subject to Subpart Dc of 40 CFR 60.) 3. 33.475 MMBtu/hr Natural Gas/Fuel Oil Fired Boiler w/Low NOx burners at North Pavilion (The boiler is subject to Subpart Dc of 40 CFR 60.) 4. 33.60 MMBtu/hr Natural Gas/Fuel Oil Fired Boiler w/Low NOx burners at North Pavilion (The boiler is subject to Subpart Dc of 40 CFR 60.) 5. 20.922 MMBtu/hr Natural Gas Fired Boiler at West Pavilion (The boiler is subject to Subpart Dc of 40 CFR 60.) 6. 3- 7 MMBtu/hr Natural Gas/Fuel Oil Fired Boilers W/ Low NOx burners at SEB Lab <p><u>Constructed prior to June 9, 1989</u></p> <ol style="list-style-type: none"> 7. 3-11.716 MMBtu/hr Natural gas fired boilers at UAB Highlands 8. 2- 5.23 MMBtu/hr Natural Gas/Fuel Oil Fired Boilers at Campbell Hall 9. 2- 10.461 MMBtu/hr Natural Gas/Fuel Oil Fired Boilers at Education Building 10. 2- 25.106 MMBtu/hr Natural Gas/Fuel Oil Fired Boilers at McCallum 11. 2- 6.277 MMBtu/hr Natural Gas/Fuel Oil Fired Boilers at Webb 		
<u>Federally Enforceable Conditions</u>		Regulations
1.	Each boiler permitted under group A, item Nos. 1 through 11 shall have an exhaust opacity not to exceed 20%, as determined by a 6-minute average, or as otherwise provided in Section 6.1.1 of the Rules and Regulations. If required by the Department, the opacity shall be determined by EPA Reference Method 9 of appendix A of 40 CFR 60.	6.1.1
2.	The opacity standard in condition No. 1 shall apply all times, except during periods of startup, shutdown, or malfunction.	6.1.1(c)
3.	<p>Each boiler, under group A, item Nos. 1 through 4 and 6 with low-NOx burners , permitted herein shall have the following emissions rates:</p> <p><u>PM Emissions</u></p> <ol style="list-style-type: none"> a) not to exceed 0.005 lb/MMBtu heat input per hour when firing natural gas: and b) not to exceed 0.040 lb/MMBtu heat input per hour when firing No. 2 fuel oil. <p>If required by the Department, the particulate matter emissions rate shall be measured by EPA Reference Method 5 of appendix A of 40 CFR 60.</p>	18.2.3

	<p><u>SO₂ Emissions</u></p> <p>a) not to exceed 0.0006 lb/MMBtu heat input per hour when firing natural gas; and b) not to exceed 0.051 lb/MMBtu heat input per hour when firing No. 2 fuel oil.</p> <p>If required by the Department, the SO₂ emissions rate shall be measured by EPA Reference Method 6c of appendix A of 40 CFR 60.</p> <p><u>NO_x Emissions</u></p> <p>a) not to exceed 0.0364 lb/MMBtu heat input per hour when firing natural gas; and b) not to exceed 0.1 lb/MMBtu heat input per hour when firing No. 2 fuel oil.</p> <p>If required by the Department, the NO_x emissions rate shall be measured by EPA Reference Method 7E of appendix A of 40 CFR 60.</p> <p><u>CO Emissions</u></p> <p>a) not to exceed 0.0375 lb/MMBtu heat input per hour when firing natural gas; and b) not to exceed 0.04 lb/MMBtu heat input per hour when firing No. 2 fuel oil.</p> <p>If required by the Department, the CO emissions rate shall be measured by EPA Reference Method 10 of appendix A of 40 CFR 60.</p> <p><u>VOC Emissions</u></p> <p>a) not to exceed 0.0055 lb/MMBtu heat input per hour when firing natural gas; and b) not to exceed 0.004 lb/MMBtu heat input per hour when firing No. 2 fuel oil.</p> <p>If required by the Department, the VOC emissions rate shall be measured by EPA Reference Method 25A of appendix A of 40 CFR 60.</p>	
4.	The maximum quantity of natural gas combusted in all 4 Steam Plant boilers in group A, item No.1 shall not exceed 1,565,142,857 cubic feet per rolling 12 month period.	18.2.3
5.	The permittee shall combust only natural gas and No. 2 fuel oil with sulfur content of 0.05% by weight in the boilers permitted herein.	18.2.3
6.	The cumulative potential PM emissions from all 4 Steam Plant boilers shall be limited to less than 25 T/yr.	18.2.3
7.	The cumulative potential PM ₁₀ emissions from all 4 Steam Plant boilers shall be limited to less than 15 T/yr.	18.2.3
8.	The cumulative potential PM _{2.5} emissions from all 4 Steam Plant boilers shall be limited to less than 10 T/yr.	18.2.3
9.	The cumulative potential NO _x emissions from all 4 Steam Plant boilers shall be limited to less than 40 T/yr.	18.2.3
10.	The cumulative potential SO ₂ emissions from all 4 Steam Plant boilers shall be limited to less than 40 T/yr.	18.2.3
11.	The cumulative potential VOC emissions from all 4 Steam Plant boilers shall be limited to less than 40 T/yr.	18.2.3
12.	<p>Each boiler, under group A, item Nos. 5, 7, 8, 9, 10, and 11 permitted herein shall have the following emissions rates:</p> <p><u>PM Emissions</u></p> <p style="text-align: center;">*</p> <p>a) not to exceed 0.003 lb/MMBtu heat input per hour when firing natural gas; and b) not to exceed 0.018 lb/MMBtu heat input per hour when firing No. 2 fuel oil</p>	18.2.3

	<p>If required by the Department, the particulate matter emissions rate shall be measured by EPA Reference Method 5 of appendix A of 40 CFR 60.</p> <p><u>SO₂ Emissions</u></p> <p>a) not to exceed 0.0006 lb/MMBtu heat input per hour when firing natural gas; and b) not to exceed 0.052 lb/MMBtu heat input per hour when firing No. 2 fuel oil.</p> <p>If required by the Department, the SO₂ emissions rate shall be measured by EPA Reference Method 6c of appendix A of 40 CFR 60.</p> <p><u>NO_x Emissions</u></p> <p>a) not to exceed 0.095 lb/MMBtu heat input per hour when firing natural gas; and b) not to exceed 0.13 lb/MMBtu heat input per hour when firing No. 2 fuel oil.</p> <p>If required by the Department, the NO_x emissions rate shall be measured by EPA Reference Method 7E of appendix A of 40 CFR 60.</p> <p><u>CO Emissions</u></p> <p>a) not to exceed 0.019 lb/MMBtu heat input per hour when firing natural gas; and b) not to exceed 0.036 lb/MMBtu heat input per hour when firing No. 2 fuel oil.</p> <p>If required by the Department, the CO emissions rate shall be measured by EPA Reference Method 10 of appendix A of 40 CFR 60.</p> <p><u>VOC Emissions</u></p> <p>a) not to exceed 0.005 lb/MMBtu heat input per hour when firing natural gas; and b) not to exceed 0.005 lb/MMBtu heat input per hour when firing No. 2 fuel oil.</p> <p>If required by the Department, the VOC emissions rate shall be measured by EPA Reference Method 25A of appendix A of 40 CFR 60.</p>	
13.	<p>The permittee shall maintain a record of the following for all Group A boilers;</p> <p>A) Quantity of natural gas combusted per month per boiler; B) Quantity of No.2 fuel oil combusted per month per boiler; and C) Hours of operation of each boiler.</p>	18.2.4
14.	<p>As a part of record keeping, the permittee shall maintain a supplier certification. The certification shall include the following;</p> <p>A) The name of the oil supplier; and B) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c of 40 CFR 60.</p>	18.2.4
15.	<p>None of the boilers permitted under Group A is subject to the requirements of Subpart JJJJJ of 40 CFR 63 as they are called gas- fired boilers as defined in 40 CFE 63.11237. The boilers can burn liquid fuels only during the periods of gas curtailments, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.</p>	40 CFR 63.11195(e), 40 CFR 63.11237, Definition
16	<p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the source permitted herein:</p> <p>A. Quantity of natural gas combusted in each boiler and each water heater;</p>	18.2.3

	B. Quantity of fuel oil combusted in each boiler; and C. Hours of operation of each boiler and each water heater.	
17.	The permittee shall make calculations all boilers and water heaters for the previous year's actual emissions of TSP, PM ₁₀ , PM _{2.5} , NO _x , SO ₂ , CO, VOC, and HAPs from all boilers. The calculations shall be submitted to the Department by February 10 th each year. Concurrence with the calculations by the Department shall be the basis for determining the annual emissions fees	18.2.3
	<u>Group B Boilers</u>	
	<u>Combust Natural Gas and Less than 10 MMBtu/hr rating</u> 1. 6.277 MMBtu/hr Natural Gas Fired Boiler at BEC 2. 2-3.347 MMBtu/hr Natural Gas Fired Boilers at Spark Bldg 3. 2.46 MMBtu/hr CH19 Hot Water Heater 4. 4.675 MMBtu/hr Natural Gas Fired Water Heater at Volker Lab 5. 3.20 MMBtu/hr Ullman Building Water Heater 6. 2.07 MMBtu/hr Natural Gas Fired Water Heater at CH19 7. 3.60 MMBtu/hr Natural Gas Fired Boiler at CH20 8. 2.95 MMBtu/hr Natural Gas Fired Boiler at WORB 9. 2.50 MMBtu/hr Natural Gas Fired Boiler at 936 BLDG. (BC/BS) 10. 2-6.277 MMBtu/hr Natural Gas Fired Boiler at Webb 11. 1.76 MMBtu/hr Natural Gas Fired Boiler at Ryal 12. 2.48 MMBtu/hr Natural Gas Fired Boiler at Ryal 13. 4.185 MMBtu/hr Natural Gas Fired Boiler at Ryal 14. 3.2 MMBtu/hr Natural Gas Fired Boiler at 9 th Avenue Bldg 15. 2.8 MMBtu/hr Natural Gas Fired Boiler at Sch. of Health Pro. 16. 2-5.23 MMBtu/hr Natural Gas Fired Boilers at Campbell Hall 17. 2.1 MMBtu/hr Natural Gas Fired Boilers at Campbell Hall 18. 4.25 MMBtu/hr Natural Gas Fired Boiler at Wallace Bell Bldg. 19. 2.31 MMBtu/hr Natural Gas Fired Boiler at Hoen Bldg. 20. 6.23 MMBtu/hr Natural Gas Fired Boiler at BEC 21. 4.184 MMBtu/hr Natural Gas Fired Boiler at Husley Center 22. 2-2.00 MMBtu/hr Natural Gas Fired Boilers at Cancer Research 23. 4-2.07 MMBtu/hr Natural Gas Fired Boilers at Blazer Hall 24. 6-2.07 MMBtu/hr Natural Gas Fired Boilers at Blount Hall 25. 2-4.184 MMBtu/hr Natural Gas Fired Boilers at Camp Hall 26. 2.10 MMBtu/hr Natural Gas Fired Boiler at Rast Hall 27. 3- 1.75 MMBtu/hr Natural Gas Fired Boilers at Univ. Dining Fac. 28. 2.049 MMBtu/hr Natural Gas Fired Boiler at Central Support 29. 3.00 MMBtu/hr Natural Gas Fired Boiler at NSRS 30. 3.00 MMBtu/hr Natural Gas Fired Boiler at NSRS 31. 3.00 MMBtu/hr Natural Gas Fired Boiler at NSRS 32. 3.00 MMBtu/hr Natural Gas Fired Boiler at NSRS	
	<u>Federally Enforceable Conditions</u>	Regulations
1.	Each boiler permitted under group B shall have an exhaust opacity not to exceed 20%, as determined by a 6-minute average, or as otherwise provided in Section 6.1.1 of the Rules and Regulations. If required by the Department, the opacity shall be determined by EPA Reference Method 9 of appendix A of 40 CFR 60.	6.1.1
2.	The opacity standard in condition No. 1 shall apply all times, except during periods of startup, shutdown, or malfunction.	6.1.1(c)
3.	Each boiler permitted herein shall have the following emission rates: a. PM = 0.003 lb/MMBtu heat input per hour. b. SO ₂ = 0.0006 lb/MMBtu heat input per hour. c. NO _x = 0.095 lb/MMBtu heat input per hour. d. VOC = 0.005 lb/MMBtu heat input per hour. e. CO = 0.019 lb/MMBtu heat input per hour.	18.2.3
4.	None of the boilers permitted under Group B is subject to the requirements of Subpart JJJJJJ of 40 CFR 63 as they are called gas- fired boilers as defined in 40 CFE 63.11237. The boilers can burn liquid fuels only	40 CFR 63.11195(e),

	during the periods of gas curtailments, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.	40 CFR 63.11237, def.
5.	The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the source permitted herein: A. Quantity of natural gas combusted in each boiler; and B. Hours of operation of each boiler.	18.2.3
6.	The permittee shall make calculations all boilers and water heaters for the previous year's actual emissions of TSP, PM ₁₀ , PM _{2.5} , NO _x , SO ₂ , CO, VOC, and HAPs from all boilers and water heaters. The calculations shall be submitted to the Department by February 10 th each year. Concurrence with the calculations by the Department shall be the basis for determining the annual emissions fees	18.2.3
Group C (Hot Water Heaters/Boilers)		
	<p>Natural Gas Fired Hot Water Heaters/Boilers:</p> <ol style="list-style-type: none"> 1. 2- 0.73 MMBtu/hr McCallum Water Heaters 2. 0.27 MMBtu/hr CEC Water Heater 3. 0.117 MMBtu/hr Natural Gas Fired Boiler at CEC 4. 2-0.713 MMBtu/hr Natural Gas Fired Boilers at CCB 5. 1.08 MMBtu/hr CH19 Domestic Hot Water Heater 6. 0.25 MMBtu/hr CH19 80-gallon Hot Water Heater 7. 2- 0.70 MMBtu/hr CBSE Hot Water Heaters 8. 2-0.56 MMBtu/hr CBSE Hot Water Heaters 9. 3-1.203 MMBtu/hr CBSE Hot Water Boilers 10. 0.365 MMBtu/hr at WORK 11. 0. 72 MMBtu/hr at WORK 12. 0.038 MMBtu/hr 936 Building (BC/BS) water Heater 13. 0.165 MMBtu/hr Burleson Hot Water Heater 14. 0.70 MMBtu/hr School of Health Professions Building Water Heater 15. 0.199 MMBtu/hr Chemistry Building Water Heater 16. 2-0.50 MMBtu/hr University Dining Facility Water Heater 17. 1.30 MMBtu/hr Natural Gas Fired Water Heater at Denman Hall 18. 2-1.23 MMBtu/hr Natural Gas Fired Water Heaters at BMRH 19. 1000 Btu/hr Natural Gas Fired Water Heater at Smolian 20. 0.25 MMBtu/hr Natural Gas Fired Water Heater at Smolian 21. 0.99 MMBtu/hr Natural Gas Fired Boiler at Central Plant 22. 3-1.203 MMBtu/hr Natural Gas Fired Boilers at CBSE 23. 0.48 MMBtu/hr Natural Gas Fired Boiler at 912 Bldg. 24. 0.26 MMBtu/hr Natural Gas Fired Boiler at 912 Bldg. 25. 2-1.29 MMBtu/hr Natural Gas Fired Boilers at Chemistry Bldg 26. 2-1.2 MMBtu/hr Natural Gas Fired Boilers at Humanities Bldg 27. 4-1.00 MMBtu/hr Natural Gas Fired Boilers at UBOB 28. 0.43 MMBtu/hr Natural Gas Fired Boiler at Bartow Arena 29. 1.064 MMBtu/hr Natural Gas Fired Boiler at Wallace Bell Bldg 30. 0.77 MMBtu/hr Natural Gas Fired Boiler at Honors House 31. 0.726 MMBtu/hr Natural Gas Fired Boiler at BEC 32. 0.886 MMBtu/hr Natural Gas Fired Boiler at SPAC 33. 2-0.546 MMBtu/hr Natural Gas Fired Boilers at AIEVA 34. 0.336 MMBtu/hr Natural Gas Fired Boiler at 711 Bldg. 35. 0.283 MMBtu/hr Natural Gas Fired Boiler at WBHM Radio 36. 2-0.922 MMBtu/hr Natural Gas Fired Boilers at Camp Hall 37. 1.467 MMBtu/hr Natural Gas Fired Boiler at Rast Hall 38. 0.512 MMBtu/hr Natural Gas Fired Boiler at Police HQ Bldg 39. 1.010 MMBtu/hr Natural Gas Fired Boiler at South Highlands 40. 0.50 MMBtu/hr Natural Gas Fired Boiler at South Highlands 41. 1.173 MMBtu/hr Natural Gas Fired Boiler at Rast Hall 42. 1.26 MMBtu/hr Natural Gas Fired Boiler at Webb 	

	Federally Enforceable Conditions	Regulations
1.	Each hot water heater/boilers permitted herein shall have an exhaust opacity not to exceed 20%, as determined by a 6-minute average, or as otherwise provided in Section 6.1.1 of the Rules and Regulations. If required by the Department, the opacity shall be determined by EPA Reference Method 9 of appendix A of 40 CFR 60.	6.1.1
2.	The opacity standard in condition No. 1 shall apply all times, except during periods of startup, shutdown, or malfunction.	6.1.1(c)
3.	Each hot water heater/boiler permitted herein shall have the following emission rates: A. PM = 0.003 lb/MMBtu heat input per hour. B. SO ₂ = 0.0006 lb/MMBtu heat input per hour. C. NO _x = 0.095 lb/MMBtu heat input per hour. D. VOC = 0.005 lb/MMBtu heat input per hour. E. CO = 0.019 lb/MMBtu heat input per hour.	18.2.3
4.	None of the hot water heaters and hot water boilers permitted under Group C is subject to the requirements of Subpart JJJJJJ of 40 CFR 63 as each hot water heaters are less than 120 US gallon capacity and each hot water boiler is less than 1.6 million Btu per hour, respectively and all of them combust natural gas. Also, included in the definition of hot water heaters are tank less units which provide on-demand hot water.	40 CFR 63.11195(f), 40 CFR 63.11237, definitions
5.	The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the source permitted herein: A. Quantity of natural gas combusted in each water heater/water heater boiler; and B. Hours of operation of each boiler and each water heater and water heater boiler.	18.2.3
6.	The permittee shall make calculations all boilers and water heaters for the previous year's actual emissions of TSP, PM ₁₀ , PM _{2.5} , NO _x , SO ₂ , CO, VOC, and HAPs from all boilers and water heaters. The calculations shall be submitted to the Department by February 10 th each year. Concurrence with the calculations by the Department shall be the basis for determining the annual emissions fees.	18.2.3

<u>Facility</u> <u>No.</u>	<u>Emissions</u> <u>Unit No.</u>	<u>Emissions Unit Description</u>
1044	002	Internal Combustion Engines (Emergency Engines)

Permit Conditions for Emissions Unit No. 002

<p><u>Internal Combustion Engines</u></p>	<p>Group A Engines (Emergency Engines and Fire Pumps):</p>
<p><u>Engines Nos. 1 through 15 commenced construction after July 11, 2005 and Subject to Subpart IIII of 40 CFR 60</u></p>	
<ol style="list-style-type: none"> 1. 2- 1214 HP Gen Set Model C27DE33 Compression Ignition Internal Combustion Engines at Central Steam Plant (Subject to Subpart IIII of 40 CFR 60) 2. 2-2146 HP Compression Ignition Internal Combustion Engines at Women and Infants Center (Subject to Subpart IIII of 40 CFR 60) 3. 923 HP Compression Ignition Internal Combustion Engines at SEB Lab (Subject to Subpart IIII of 40 CFR 60) 4. 685 HP Compression Ignition Internal Combustion Engines at Heritage Hall (Subject to Subpart IIII of 40 CFR 60) 5. 670 HP Compression Ignition Internal Combustion Engine at Student Residence Hall (Subject to Subpart IIII of 40 CFR 60) 6. 1207 HP Compression Ignition Internal Combustion Engine at Rast Computer Room (Subject to Subpart IIII of 40 CFR 60) 7. 335 HP Compression Ignition Internal Combustion Engine at 936 Building (Subject to Subpart IIII of 40 CFR 60) 8. 805 HP Compression Ignition Internal Combustion Engines at Steam Generating Plant Generator 1 (Subject to Subpart IIII of 40 CFR 60) 9. 805 HP Compression Ignition Internal Combustion Engines at Steam Generating Plant Generator 2 (Subject to Subpart IIII of 40 CFR 60) 10. 805 HP Compression Ignition Internal Combustion Engines at AIEVA Center (Subject to Subpart IIII of 40 CFR 60) 11. 54 HP Compression Ignition Internal Combustion Engine at OH & S Support Facility (Subject to Subpart IIII of 40 CFR 60) 12. 107 HP Compression Ignition Internal Combustion Engine at OHS Support Facility Fire Pump (Subject to Subpart IIII of 40 CFR 60) 13. 670 HP Compression Ignition Internal Combustion Engine at Hill Center (Subject to Subpart IIII of 40 CFR 60) 14. 402 HP Compression Ignition Internal Combustion Engine at Heritage Hall (Subject to Subpart IIII of 40 CFR 60) 15. 40 HP Compression Ignition Internal Combustion Engine at 616 Building (Subject to Subpart IIII of 40 CFR 60) 	
<p><u>Engine nos. 16, 17, 18, 19, and 20 are subject to Subpart JJJJ of 40 CFR 60</u></p>	
<ol style="list-style-type: none"> 16. 40 HP Spark Ignition Internal Combustion Engine at WBHM (Subject to Subpart JJJJ of 40 CFR 60, manufactured after January 1, 2009) 17. 34 HP Spark Ignition Internal Combustion Engine at Remote Parking Lot #4 (Subject to Subpart JJJJ of 40 CFR 60, manufactured after January 1, 2009) 18. 67 HP Spark Ignition Internal Combustion Engine at Parking Deck # 16 (Subject to Subpart JJJJ of 40 CFR 60) 19. 50 HP Spark Ignition Internal Combustion Engine (Fire Pump) at Lister Hall (Subject to Subpart JJJJ of 40 CFR 60, manufactured after January 1, 2009) 20. 201 HP Spark Ignition Internal Combustion Engine at Education Bldg-Telecom Room (Subject to Subpart JJJJ of 40 CFR 60, manufactured after January 1, 2009) 	

	Federally Enforceable Conditions	Regulations
1.	The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the source permitted herein: A. Quantity of fuel oil combusted by engine Nos. 1-15; B. Quantity of natural gas combusted by engine Nos.16 through 20; and C. Hours of operation of each engine.	18.2.3
2.	Each generator engine permitted herein under Group A shall have an exhaust opacity not to exceed 20%, as determined by a 6-minute average, or as otherwise provided in Section 6.1.1 of the Rules and Regulations. The opacity shall be determined by EPA Reference Method 9 of appendix A of 40 CFR 60.	6.1.1
3.	The opacity standard in condition No. 2 shall apply all times, except during periods of startup, shutdown, or malfunction.	6.1.1(c)
4.	The generator engine Nos. 1 through 15 permitted herein under Group A shall have the following additional opacity limits certified by manufacturers: A. 20% opacity during the acceleration mode; B. 15% opacity during the lugging mode; and C. 50% opacity during the peaks in either the acceleration or lugging modes.	40 CFR 89.113(a)
5.	The engine Nos. 1 through 15 permitted herein under Group A must be in compliance with the applicable emissions standards in 40 CFR 60.4205 for all pollutants for the model year and maximum engine power.	40 CFR 60.4205(a)
6.	The sulfur content of the diesel fuel burned in each engine permitted under Group A shall not exceed 15 ppm per gallon of oil or 0.0015% sulfur by weight as required in 40 CFR 80.510(b).	40 CFR 60.4207(b)
7.	All engines under group A shall be exempt from the applicability of Subpart ZZZZ of 40 CFR 63 as they are considered as existing institutional emergency stationary RICEs located at an area source of HAPs emissions. The exemption is contingent upon the fact that the engines are operated according to the requirements included in 40 CFR 63.6640(f), (f)(1),(f)(2),(2)(i), and f (4) and comply with the definition of Emergency Stationary RICE in 40 CFR 63.6675.	40 CFR 63.6585(f)(3)
8.	All compression ignition internal combustion engines shall comply with the requirements of Subpart IIII of 40 CFR 60.	40 CFR 60.4211(f), (f) (1), (f)(2), (f)(2)(i), and (f)(3)
9.	Engine Nos. 16 through 20 must comply with the emission standards as specified in Table 1 in Subpart JJJJ of 40 CFR 60	40 CFR 60.4230(a)(4)(iv) 40 CFR 60.4233(d)
10.	The permittee must operate and maintain engine Nos.16 through 20 that achieved the emission standards as required in §60.4233 of subpart JJJJ of 40 CFR 60.	40 CFR 60.4243(d)
11.	All spark ignition engines shall be operated in compliance with the applicable requirements in §60.4243 of Subpart JJJJ 40 CFR 60.	40 CFR 60.4243(d), (d) (1), (d)(2), (d)(3), and (d)(3)(i)

12.	The permittee shall make calculations for all engines in Group A for the previous year's actual emissions of TSP, PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO, VOC, and HAPs. The calculations shall be submitted to the Department by February 10 th each year. Concurrence with the calculations by the Department shall be the basis for determining the annual emissions fees.	18.2.3
<p>Group B Engines (Emergency Engines):</p> <p><u>All Compression Ignition Engines under Group B commenced construction prior to July 11, 2005 and all Spark Ignition Engines were manufactured prior to January 1, 2009</u></p> <ol style="list-style-type: none"> 73.75 HP Compression Ignition Internal Combustion Engine at Admin Building 99 HP Compression Ignition Internal Combustion Engines at Bartow Arena 2-1199 HP Compression Ignition Internal Combustion Engines at Bevill 805 HP Compression Ignition Internal Combustion Engine at Biomedical Res Bldg II 16 HP Compression Ignition Internal Combustion Engine at Business & Engineering Complex 248 HP Compression Ignition Internal Combustion Engine at Camp Hall 107 HP Compression Ignition Internal Combustion Engine at Campbell - 1 73 HP Compression Ignition Internal Combustion Engine at Campbell - 2 321 HP Compression Ignition Internal Combustion Engine at Rec Center 281 HP Compression Ignition Internal Combustion Engine at Cancer Research 805 HP Compression Ignition Internal Combustion Engine at AIEVA Building 1200 HP Compression Ignition Internal Combustion Engine at Central Utility # 1 107 HP Compression Ignition Internal Combustion Engine at Central Utility # 3 134 HP Spark Ignition Internal Combustion Engine at Central Utility # 5 27 HP Spark Ignition Internal Combustion Engine at Community Care Bldg 47 HP Spark Ignition Internal Combustion Engine at Community Care Bldg 107 HP Spark Ignition Internal Combustion Engine at Community Care Bldg- 3 20 HP Spark Ignition Internal Combustion Engine at Community Health Services 19th St. - 1 47 HP Spark Ignition Internal Combustion Engine at Community Health Services 19th St. - 2 1005 HP Compression Ignition Internal Combustion Engine at Dentistry 382 HP Compression Ignition Internal Combustion Engine at Facilities Admin Building 2923 HP Compression Ignition Internal Combustion Engine at Kaul Genetics Bldg 1206 HP Compression Ignition Internal Combustion Engine at McCallum Building (BHSB) 805 HP Compression Ignition Internal Combustion Engine at Research Support Building 805 HP Compression Ignition Internal Combustion Engine at Rust 750 HP Compression Ignition Internal Combustion Engine at Ryals School of Public Health 27 HP Compression Ignition Internal Combustion Engine at University Blvd Office Building 182 HP Compression Ignition Internal Combustion Engines at School of Health Professions Building 2682 HP Compression Ignition Internal Combustion Engine at Shelby, IRB 670 HP Compression Ignition Internal Combustion Engine at Alys Stephens Center 402 HP Compression Ignition Internal Combustion Engine at Tinsley Harrison Tower 603 HP Compression Ignition Internal Combustion Engine at Volker Hall New Tower 402 HP Compression Ignition Internal Combustion Engine at Webb Building 21 HP Compression Ignition Internal Combustion Engine at WBHM 207 HP Compression Ignition Internal Combustion Engine at Worrell 207 HP Compression Ignition Internal Combustion Engine at Ziegler Research Building 3-1310 HP Compression Ignition Internal Combustion Engine at QB Tower 465 HP Compression Ignition Internal Combustion Engine at General Services Building 820 HP Compression Ignition Internal Combustion Engine at Parking Deck 6th Ave. # 1 1120 HP Compression Ignition Internal Combustion Engine at Parking Deck 6th Ave. # 2 465 HP Compression Ignition Internal Combustion Engine at Spain Rehab Rm 9 166 HP Compression Ignition Internal Combustion Engine at Spain Rehab 250 HP Compression Ignition Internal Combustion Engine at Jeff Tower North Wing Basement # 1 250 HP Compression Ignition Internal Combustion Engine at Jeff Tower North Wing Basement # 2 67 HP Compression Ignition Internal Combustion Engine at Jeff Tower South Wing, Basement # 1 335 HP Compression Ignition Internal Combustion Engine at Jeff Tower South Wing, Basement # 2 603 HP Compression Ignition Internal Combustion Engine at Spain Wallace Bldg 1 603 HP Compression Ignition Internal Combustion Engine at Spain Wallace Bldg 2 900 HP Compression Ignition Internal Combustion Engine at West Pavilion 1 900 HP Compression Ignition Internal Combustion Engine at West Pavilion 2 600 HP Compression Ignition Internal Combustion Engine at Center for Psychiatric Medicine 1006 HP Compression Ignition Internal Combustion Engine at Russell Wing 		

	53. 2011 HP Compression Ignition Internal Combustion Engine at North Pavilion 1 54. 2011 HP Compression Ignition Internal Combustion Engine at North Pavilion 2 55. 2011 HP Compression Ignition Internal Combustion Engine at North Pavilion 3 56. 2011 HP Compression Ignition Internal Combustion Engine at North Pavilion 4 57. 11 HP Compression Ignition Internal Combustion Engine at Brems 58. 27 HP Spark Ignition Internal Combustion Engine at Burlson Building 59. 107 HP Compression Ignition Internal Combustion Engine at Denman Hall 60. 11 HP Spark Ignition Internal Combustion Engine at Motor Pool Storage 61. 27 HP Compression Ignition Internal Combustion Engine at Parking Deck # 3 62. 27 HP Compression Ignition Internal Combustion Engine at Police Headquarters Building 63. 201 HP Compression Ignition Internal Combustion Engine at Blazer Hall 64. 201 HP Compression Ignition Internal Combustion Engine at Blount Hall 65. 335 HP Compression Ignition Internal Combustion Engine at school of Dentistry 66. 27 HP Compression Ignition Internal Combustion Engine at Rast Hall - 1 67. 201 HP Compression Ignition Internal Combustion Engine at Rast Hall - 2 68. 201 HP Spark Ignition Internal Combustion Engine at Parking Deck # 7 69. 805 HP Spark Ignition Internal Combustion Engine at Sparks Center 70. 27 HP Compression Ignition Internal Combustion Engine at University Building Office Building 71. 241 HP Compression Ignition Internal Combustion Engine (fire Pump) at Biophysical Science & Engineering 72. 262 HP Compression Ignition Internal Combustion Engine (fire Pump) at School of Health Profession 73. 1207 HP Compression Ignition Internal Combustion Engine at Kirklin Clinic	
	Federally Enforceable Conditions	Regulations
1.	<p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the source permitted herein:</p> <p>A. Quantity of fuel oil combusted by each generator; and B. Hours of operation of each generator.</p>	18.2.3
2.	Each generator permitted herein shall have an exhaust opacity not to exceed 20%, as determined by a 6-minute average, or as otherwise provided in Section 6.1.1 of the Rules and Regulations. The opacity shall be determined by EPA Reference Method 9 of appendix A of 40 CFR 60.	6.1.1
3.	The opacity standard in condition No. 2 shall apply all times, except during periods of startup, shutdown, or malfunction.	6.1.1(c)
4.	The sulfur content of the diesel fuel burned in each generator permitted under Group B shall not exceed 15 ppm per gallon of oil or 0.0015% sulfur by weight as required in 40 CFR 80.510(b).	40 CFR 60.4207(b), 18.2.3
5.	All engines under group B shall be exempt from the applicability of Subpart ZZZZ of 40 CFR 63 as they are considered as existing institutional emergency stationary RICEs located at an area source of HAPs emissions. The exemption is contingent upon the fact that the engines are operated according to the requirements included in 40 CFR 63.6640(f), (f)(1), (f)(2), (2)(i), and f (4) and comply with the definition of Emergency Stationary RICE in 40 CFR 63.6675.	40 CFR 63.6585(f)(3)
6.	<p>All emission calculations for the compression ignition and spark ignition internal combustion engines in group B shall comply with the emissions calculated based on the following formula and fuel consumption rates per hour:</p> <p>1. Combusting diesel fuel (Source: Thompson Tractor) $(KW \times 0.075 \text{ Gal/hr} \times 50 \text{ hr/yr} \times EF) / 2000 \text{ lb/T} = \text{emissions in T/yr}$</p> <p>2. Combusting natural gas (Source: Thompson Tractor) $(KW \times 0.072 \text{ cu.ft/hr} \times 50 \text{ hr/yr} \times EF) / 2000 \text{ lb/T} = \text{emissions in T/yr}$</p> <p>Conversion factor can be used if needed : 1 HP = 0.745699872 KW</p>	18.2.3

7.	Each compression ignition internal combustion engine permitted herein under shall have the following additional opacity limits certified by manufacturer: A. 20% opacity during the acceleration mode; B. 15% opacity during the lugging mode; and C. 50% opacity during the peaks in either the acceleration or lugging modes.	40 CFR 89.113(a), 18.2.3
8.	All compression ignition internal combustion engines shall comply with the requirements of Subpart IIII of 40 CFR 60.4211.	40 CFR 60.4211(f), (f) (1), (f)(2), (f)(2)(i), (f)(3), and 18.2.3
9.	The sulfur content of the diesel fuel burned in each engine permitted herein shall not exceed 15 ppm per gallon of oil or 0.0015% sulfur by weight as required in 40 CFR 80.510(b).	40 CFR 60.4207(b), 18.2.3
10.	All spark ignition internal combustion engines shall comply with the requirements of Subpart JJJJ of 40 CFR 60.4243.	40 CFR 60.4243(d), (d) (1), (d)(2), (d)(3), (d)(3)(i), and 18.2.3
11.	The permittee shall make calculations for all engines in Group B for the previous year's actual emissions of TSP, PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO, VOC, and HAPs. The calculations shall be submitted to the Department by February 10 th each year. Concurrence with the calculations by the Department shall be the basis for determining the annual emissions fees.	18.2.3

<u>Facility No.</u>	<u>Emissions Unit No.</u>	<u>Emissions Unit Description</u>
1044	003	<p>Incinerators:</p> <p>A. 225 lbs/hr Therm Tec Model G16P1 Incinerator (Batch Incinerator) at 600 Block of 7th Avenue South (Small HWIWI, Subject to Subpart Ec of 40 CFR 60)</p> <p>B. 150 lbs/hr International Model Power Pak I Incinerator at Volker Hall</p>

Permit Conditions for Emissions Unit No. 003

	Federally Enforceable Conditions	Regulations
1.	<p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the source permitted herein:</p> <p>A. Quantity of materials combusted in each incinerator; B. Quantity of natural gas combusted in each incinerator; and C. Hours of operation of each incinerator</p>	18.2.3
2.	The permittee shall not cause or permit the emissions of objectionable odor from the incinerators.	18.2.3
3.	The permittee shall charge the Them Tec incinerator at a rate not to exceed 225 lbs/hr.	18.2.3
4.	<p>The Therm Tec incinerator permitted herein shall have the following emission limits at 7% oxygen, dry basis:</p> <p>A) PM = 66 mg per dscm (0.029 gr/dscf) B) CO = 20 parts per million by volume C) Dioxins/furans = 16 nanograms per dscm total (7 gr/billion dscf) or 0.013 nanograms per dscm total dioxins/furans TEQ (0.0057 gr/billion dscf) D) HCL = 15 parts per million or 99% reduction E) SO₂ = 1.4 Parts per million by volume F) NO_x = 67 Parts per million by volume G) Lead = 0.31 milligrams/dscm (0.14 gr/dscf) H) Cadmium = 0.017 milligrams/dscm (0.0074 gr/dscf) I) Mercury = 0.014 milligrams /dscm (0.0061 gr/dscf)</p>	40 CFR 60.52c(a), Table 1B
5.	The Therm Tec incinerator permitted herein shall not discharge into the atmosphere from the stack any gases that exhibit greater than 6% opacity (6-minute block average).	40 CFR 60.52c(b)(2)
6.	The opacity standard in Condition No. 5 shall apply all times except during periods of startup, shutdown, and malfunction.	40 CFR 60.11(c)
7.	<p>Special permission was granted to the permittee at its request to incinerate the following substances in the Therm Tec Incinerator;</p> <p>A. Animal carcasses B. Contaminated medical waste listed below i) Ethidium Bromide contaminated medical waste ii) Select agents [CJD, ebola, and prions (infectious agents)] iii) Decayed radioactive isotopes no longer regulated by NRC (trace amounts of S, P, I, Tc, Cr, and Ca); and iv) Sharps (scalpels, needles, and syringes) v) SEB Lab HEPA Filters and misc. lab waste (pipettes, PPE)</p>	18.2.3

	<p>C. Evidence destruction which includes confiscated drugs and drug paraphernalia from DEA, FBI, and UAB Police Department; and</p> <p>D. Misc. items include food grade oil filter for kitchen grease, contaminated flammable items (non-hazardous solvent rags), containers polyester and fiber, proprietary investigational drugs, Schedule I-IV controlled substances, unidentified miscellaneous non-hazardous pharmaceuticals, uniforms from UAB police Department (Shoes, belts, pants, shirts, protective coverings and credit cards and phones.</p> <p>All radioactive materials disposal via incineration must be done in accordance with Alabama Department of Public Health Office of Radiological Control (AORC) Rules as outlined in Parts .01, .02, and 10 CFR 61.</p>	
8.	<p>The Therm Tec incinerator will not be subject to the requirements of Subpart Ec of 40 CFR 60 during periods when pathological waste, low-level radioactive waste and/or chemotherapeutic waste (all defined in Subpart Ec of 40 CFR 60) and other non-medical waste, as listed in Condition No. 11, is burned. The permittee must keep records on a calendar quarter basis of the periods of time when only pathological waste, low-level radioactive waste, and/or chemotherapeutic waste, and other non-medical waste is burned.</p>	40 CFR 60.50c(b) 18.2.3
9.	<p>The Power Pak I incinerator permitted herein shall have an exhaust opacity not to exceed 20%, as determined by a 6-minute average, or as otherwise provided in Section 6.1.1 of the Rules and Regulations. If required by the Department, the opacity shall be determined by EPA Reference Method 9 of appendix A of 40 CFR 60.</p>	6.1.1
10.	<p>The opacity standard in Condition No. 13 shall apply all times except during periods of startup, shutdown, and malfunction.</p>	6.1.1(c)
11.	<p>The Power Pak I incinerator permitted herein shall have a particulate matter (PM) emissions rate, from each incinerator, not to exceed 0.20 lb per 100 lbs charged. If required by the Department, the PM emissions rate shall be measured by EPA Reference Method 5 of appendix A of 40 CFR 60.</p>	5.2.2
12.	<p>The permittee shall incinerate in the Power Pak I incinerator only Type 0 to Type IV wastes as defined in IIA (Incinerator Institute of America) and not any medical/infectious waste, as defined in 40 CFR 60.51(c).</p>	18.2.3
13.	<p>The permittee shall charge the Power Pak I incinerator permitted herein at a rate not to exceed 150 lbs/hr.</p>	18.2.3
14.	<p>The permittee shall make calculations for the previous year's actual emissions of TSP, PM₁₀, and PM_{2.5}, CO, NO_x, VOC, SO_x, and HAPs from the sources permitted herein. The calculations shall be submitted to the Department by February 10th each year. Concurrence with the calculations by the Department shall be the basis for determining the annual emissions fees.</p>	18.2.3

<u>Facility No.</u>	<u>Emissions Unit No.</u>	<u>Emissions Unit Description</u>
1044	004	<p>Gasoline Dispensing Facilities and Underground Storage Tanks:</p> <p>2- Gasoline Dispensing Facilities with 2-10,000 Gallon Underground Gasoline Storage Tanks equipped with Conservation Vents, Submerged Fill Pipes, and Vapor Collection Systems (Stage I Controls). Each gasoline dispensing facility is connected to a 10,000 gallon underground storage tank (Each gasoline dispensing facility is subject to the requirements of Subpart CCCCCC of 40 CFR 63.)</p>

Permit Conditions for Emissions Unit No. 004

	<u>Federally Enforceable Conditions</u>	<u>Regulations</u>
1.	The permittee shall not transfer, cause, or allow the transfer of gasoline from a gasoline tank truck into any stationary gasoline storage tank subject to Part 8.7 of the Rules and Regulations, unless the tank is equipped with a submerged fill pipe and the vapors are displaced from the storage tank during filling are processed by a vapor control system in accordance with Section 8.7.4 of the Rules and Regulations.	8.7.3
2.	The permittee must install a vapor balance system (Stage I) between the stationary storage tank and the gasoline tank truck and a system that will ensure the vapor line is connected before gasoline can be transferred into the tank.	8.7.4(a)
3.	The permittee shall not permit the transfer of gasoline between a gasoline tank truck and a stationary storage tank unless the gasoline tank truck complies with Part 8.20 of the Rules and Regulations and the vapor control system is connected and operating in accordance with Section 8.7.4.	8.7.5(a)
4.	The permittee shall maintain written records of the monthly throughput quantities in gallons and types of petroleum distillates in all stationary storage tanks.	8.7.5(b)
5.	The permittee shall submit to the Health Officer, as a minimum, an annual summary report of the record required under Paragraph 8.7.5(b) of the Rules and Regulations.	8.7.5(c)
6.	The permittee shall make available to the representatives of the Health Officer, upon request, copies of all records and reports required under Paragraphs 8.7.5(b) and (c) and retain the records and reports for a minimum of two (2) years after the date on which the documents were made.	8.7.5(d)
7.	The permittee shall facilitate inspection of the gasoline dispensing facility by locating Pressure/vacuum (P/V) vents such that they are visible for inspection from the ground and by providing ready access to the storage tank during time of inspection, including but not necessarily limited to unlocking gas caps or providing keys to the inspector.	8.7.5(e)
8.	The permittee shall not cause or allow gasoline to be spilled, discarded in sewers, stored in the open containers, or handled in any other manner that would result in evaporation of the gasoline to the atmosphere.	8.7.6
9.	The permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. The permittee shall take all measures specified in 40 CFR 63.11116(a).	40 CFR 63.11119(a)
10.	The permittee shall not bypass vapor control system (Stage I controls) for the gasoline storage tanks located at the gasoline dispensing facility permitted herein and shall maintain the Emissions Unit in proper working order in accordance with Part 8.7 of the Rules and Regulations.	8.7.7

11.	The permittee shall not allow a gasoline tank truck subject to Part 8.20 of the Rules and Regulations, to be filled or emptied unless the gasoline tank truck has a vapor collection system that meets the test requirements of Paragraph 8.20.4(a) of the Rules and Regulations.	8.20.3(a)
12.	The permittee shall not allow a gasoline tank truck subject to Part 8.20 of the Rules and Regulations, to be filled or emptied unless the gasoline tanker truck has a valid Jefferson County Department of Health Air Sticker attached and visibly displayed.	8.20.3(b)
13.	The permittee shall maintain written records of monthly throughput quantities, in gallons and types, of petroleum distillate in all storage tanks. The annual summary report for the previous calendar of the monthly records shall be submitted to this Department by February 10 th of each calendar year.	8.7.5 18.2.3

<u>Facility No.</u>	<u>Emissions Unit No.</u>	<u>Emissions Unit Description</u>
1044	005	Hospital Ethylene Oxide Sterilization Unit at South Highlands Hospital (The Hospital Ethylene Oxide Sterilization unit is subject to the requirements of Subpart WWWW of 40 CFR 63.)

Permit Conditions for Emissions Unit No. 006

	Federally Enforceable Conditions	Regulations
1.	The permittee must sterilize full loads of items having a common aeration time, except under medically necessary circumstances, as the term defined in 40 CFR 63.10448.	40 CFR 63.10390
2.	The permittee must demonstrate initial compliance with the management practice standard in 40 CFR 63.10390	40 CFR 63.10400
3.	The sterilization unit not equipped with an air pollution control device, the permittee must demonstrate continuous compliance with the management practice standard in 40 CFR 63.10390 by recording the date of each sterilization cycle, whether each sterilization cycle contains a full load of items, and if not, a statement from the hospital central services staff, a hospital administrator, or a physician that it was medically necessary.	40 CFR 63.10420
4.	The permittee must submit an initial notification of compliance status that includes the information required in paragraphs (a)(1) through (5) of 40 CFR 63.10430 and the applicable certification as required in 40 CFR 63.10400	40 CFR 63.10430
5.	The permittee must keep the records as specified below: A) A copy of the initial Notification of Compliance Status that you submitted to comply with this subpart. B) Records required in 40 CFR 63.10420 of Subpart WWWW for the sterilization unit permitted herein.	40 CFR 63.10432
6.	The permittee must keep and maintain all records as specified below: A) All records must be in a form suitable and readily available for expeditious review. B) Each record must be kept for 5 years following the date of each record. C) Each record must be kept onsite for at least 2 years after the date of each record. The facility may keep the records offsite for the remaining 3 years.	40 CFR 63.10432