

University of Arkansas, Fayetteville Campus  
 Permit #: 2011-AR-15  
 AFIN: 72-00026

Regulations
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective March 14, 2016
40 CFR Part 60, Subpart Dc – <i>Standards of Performance for Small Industrial</i>
40 CFR Part 60, Subpart IIII – <i>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines</i>
40 CFR Part 60, Subpart JJJJ – <i>Standards of Performance for Stationary Spark Ignition Internal Combustion Engines</i>
40 CFR Part 60, Subpart KKKK – <i>Standards of Performance for Stationary Combustion Turbines</i>
40 CFR Part 63, Subpart ZZZZ – <i>National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>
40 CFR Part 63, Subpart CCCCCC – <i>National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities</i>

Total Allowable Emissions

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

TOTAL ALLOWABLE EMISSIONS		
Pollutant	Emission Rates	
	lb/hr	tpy
PM	13.5	9.6
PM <sub>10</sub>	13.4	9.6
PM <sub>2.5</sub>	See Note*	
SO <sub>2</sub>	10.5	2.4
VOC	106.6	13.0
CO	447.4	86.1
NO <sub>x</sub>	322.2	78.3
Lead	4.31E-05	1.89E-04
Acrolein	3.77E-01	9.51E-02
Cadmium	2.21E-04	1.06E-02
POM	1.93E-04	8.46E-04

Greenhouse Gas report information for  
 University Of Arkansas  
 Fayetteville, Arkansas  
 Calender Year 2018

Total Natural Gas Consumed by UAF	685,383 Mcf	703,203 MMBtu <sup>1</sup>	37,312 Metric tons of CO <sub>2</sub> <sup>2,5</sup>	37,360.8 Metric tons of CO <sub>2</sub> <sup>2,5</sup> 0.705 Metric tons of CH <sub>4</sub> 0.071 Metric Tons of N <sub>2</sub> O 37,399.5 Metric Tons of CO <sub>2</sub> Equivalent
			0.703 Metric tons of CH <sub>4</sub>	
Largest Unit is HRSG	87.800 MMBtu/hr		0.070 Metric Tons of N <sub>2</sub> O	
			<b>37,350.50</b> Metric Tons of CO <sub>2</sub> Equivalent	
Total Diesel consumed for non-emergency use	4,787 Gallons	660.5 MMBtu <sup>3</sup>	48.85 Metric tons of CO <sub>2</sub> <sup>4,5</sup>	
			0.001982 Metric tons of CH <sub>4</sub>	
Largest Unit is Generator 1 at Heat at 1186 hp <sup>6</sup>	8.128 MMBtu/hr		0.000396 Metric Tons of N <sub>2</sub> O	
			<b>49.02</b> Metric Tons of CO <sub>2</sub> Equivalent	

Note 1: Based on Default HHV from Table C-1 of 1.026 MMBtu/Mscf (updated December 2013)

Note 2: Based on Default Emission Factors of 53.06 kg/MMBtu for CO<sub>2</sub>, 0.001 kg/MMBtu for CH<sub>4</sub>, and 0.0001 kg/MMBtu for N<sub>2</sub>O, from Tables C-1 (updated December 2013) and C-2

Note 3: Based on Default HHV from Table C-1 of 0.138 MMBtu/gal

Note 4: Based on Default Emission Factors of 73.96 kg/MMBtu for CO<sub>2</sub>, 0.003 kg/MMBtu for CH<sub>4</sub>, and 0.0006 kg/MMBtu for N<sub>2</sub>O, from Table C-1 and C-2

Note 5: Global Warming Potentials of 25 for CH<sub>4</sub> and 298 for N<sub>2</sub>O were applied to convert the mass emission factors to a CO<sub>2</sub>e basis (updated December 2013)

Note 6: MMBtu calculations came from max fuel rate of 58.9 gph at 100% loaded. Diesel has 138,000 Btu/gallon.