

**Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
200 Fair Oaks Lane, 1st Floor
Frankfort, Kentucky 40601
(502) 564-3999**

Final

**AIR QUALITY PERMIT
Issued under 401 KAR 52:030**

Permittee Name: Western Kentucky University
Mailing Address: 1906 College Heights Blvd, Bowling Green, KY
42101

Source Name: Western Kentucky University
Mailing Address: 1906 College Heights Blvd
Bowling Green, KY 42101

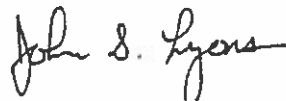
Source Location: Bowling Green campus

Permit ID: F-13-017
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Regional Office: Bowling Green Regional Office
2642 Russellville Road
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Application
Complete Date: March 12, 2013
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**John S. Lyons, Director
Division for Air Quality**

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	Permit type	Activity#	Complete Date	Issuance Date	Summary of Action
F-13-017	Initial	APE20130001	3/12/2013	7/01/2013	Initial Operating Permit

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality (Division) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Energy and Environment Cabinet (Cabinet) or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 04 (EP 4) and 05 (EP 5)

**Two Natural Gas-fired
Indirect Heat Exchangers**

Description:

EU 04

Maximum Rating: 48.8 MMBtu/hr

Construction Commenced: September 2009

EU 5

Maximum Rating: 96.8 MMBtu/hr

Construction Commenced: May 2011

Control Equipment: Low NO_x Burners, FGR

APPLICABLE REGULATIONS:

401 KAR 59:015, New Indirect Heat Exchangers

40 CFR 60 Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

NON-APPLICABLE REGULATIONS:

401 KAR 63:002, incorporating by reference 40 CFR 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers: Area Sources. This regulation does not apply to natural gas-fired boilers [40 CFR 63.11195(e)].

1. Operating Limitations:

See Section D., **Source Emission Limitations and Testing Requirements.**

2. Emission Limitations:

- a. Particulate matter emissions from each unit shall not exceed 0.10 lb/MMBtu, based on a three (3)-hour average [401 KAR 59:015].
- b. Visible emissions shall not exceed twenty (20) percent opacity except:
 1. A maximum of twenty-seven (27) percent opacity shall be permissible for not more than one (1) six (6)-minute period in any sixty (60) consecutive minutes [401 KAR 59:015, Section 4(2)(a)].
 2. Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations [401 KAR 59:015, Section 4(2)(b)].
- c. Emissions of sulfur dioxide from each unit shall not exceed 0.8 lb/MMBtu, based on a twenty-four (24)-hour average [401 KAR 59:015].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Emission Limitations (Continued):

Compliance Demonstration:

These units are considered to be in compliance with the particulate matter, sulfur dioxide, and opacity standards while burning natural gas.

d. See Section D., Source Emission Limitations and Testing Requirements.

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

The permittee shall monitor natural gas usage (MMscf) source-wide, and for each emission unit, on a monthly basis [401 KAR 52:030, Section 10].

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of natural gas usage (MMscf) source-wide, and for each emission unit, on a monthly basis [401 KAR 52:030, Section 10].

6. Specific Reporting Requirements:

See Section F., Monitoring, Recordkeeping, and Reporting Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06

Indirect Heat Exchangers

Description:

Fifty (50) Natural Gas-fired Indirect Heat Exchangers
 rated less than 10 MMBtu/hr and greater than or equal to 1 MMBtu/hr
 (Total Heat Input Capacity = 88.46 MMBtu/hr)
 Construction commenced: After April 9, 1972

Emission Point	Construction Commenced	Heat Input (MMBtu/hr)
6F	1990	3.35
6A	1992	1.27
6C	1992	3.35
6Y	1993	2.73
6AC	1993	3.35
6E	1996	3.2
South Campus # 2	1997	1
South Campus # 3	1997	1
South Campus # 4	1997	1
6I	1998	1.05
6J	1998	1.6
6X	1998	1.68
6B	2001	3.2
6O	2001	1.69
6P	2001	1.69
6Q	2001	1.69
6R	2001	1.69
6S	2001	1.69
6T	2001	1.69
6U	2001	1.69
6V	2001	1.69
6AI	2001	1.6
6AJ	2001	1.6
6N	2013	1
6N	2013	1
6AD	2002	2.07

Emission Point	Construction Commenced	Heat Input (MMBtu/hr)
Mass Media & Tech	2003	1
6AE	2002	2.07
6AF	2002	2.07
6AG	2002	2.07
6AH	2002	1.8
6W	2003	2.8
6AM	2003	3.13
6AN	2003	1.25
3GI	2007	1.5
3G2	2007	1.5
6L1	2007	1.5
6L2	2007	1.5
3J1	2007	1.5
3J2	2007	1.5
6AO	2007	2
6AP	2007	2
6AQ	2007	2
6AS	2007	1.1
6AK	2008	1.8
6AL	2008	1.8
Smith Stadium East	2008	1.0
College of Education	2009	1.0
College of Education	2009	1.0
Van Meter Hall	2009	1.0

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

APPLICABLE REGULATIONS:

401 KAR 59:015, New Indirect Heat Exchangers

1. Operating Limitations:

See Section D., **Source Emission Limitations and Testing Requirements.**

2. Emission Limitations:

a. Particulate matter emissions from each unit's stack shall not exceed 0.10 lb/MMBtu, based on a three (3)-hour-average [401 KAR 59:015].

b. Visible emissions shall not exceed twenty (20) percent opacity except:

1. A maximum of twenty-seven (27) percent opacity shall be permissible for not more than one (1) six (6)-minute period in any sixty (60) consecutive minutes [401 KAR 59:015, Section 4(2)(a)].

2. Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations [401 KAR 59:015, Section 4(2)(b)].

c. Sulfur dioxide emissions from each unit's stack shall not exceed 0.8 lb/MMBtu, based on a twenty-four (24)-hour average [401 KAR 59:015].

Compliance Demonstration:

These units are considered to be in compliance with the particulate matter, sulfur dioxide, and opacity standards while burning natural gas.

d. See Section D., **Source Emission Limitations and Testing Requirements.**

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

The permittee shall monitor source-wide natural gas usage (MMscf) on a monthly basis [401 KAR 52:030, Section 10].

5. Specific Recordkeeping Requirements:

The permittee shall maintain source-wide records of natural gas usage (MMscf) on a monthly basis [401 KAR 52:030, Section 10].

6. Specific Reporting Requirements:

See Section F., **Monitoring, Recordkeeping, and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 07 (EP 7)

Indirect Heat Exchanger

Description:

Natural Gas-fired Indirect Heat Exchanger
Maximum Rating: 20 MMBtu/hr
Construction Commenced: 1992

APPLICABLE REGULATIONS:

401 KAR 59:015, New Indirect Heat Exchangers

40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

NON-APPLICABLE REGULATIONS:

401 KAR 63:002, incorporating by reference 40 CFR 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers: Area Sources. This regulation does not apply to natural gas-fired boilers [40 CFR 63.11195(e)].

1. Operating Limitations:

See Section D., Source Emission Limitations and Testing Requirements.

2. Emission Limitations:

- a. Particulate matter emissions from the stack shall not exceed 0.10 lb/MMBtu, based on a three (3)-hour-average [401 KAR 59:015].
- b. Visible emissions shall not exceed twenty (20) percent opacity except:
 1. A maximum of twenty-seven (27) percent opacity shall be permissible for not more than one (1) six (6)-minute period in any sixty (60) consecutive minutes [401 KAR 59:015, Section 4(2)(a)].
 2. Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations [401 KAR 59:015, Section 4(2)(b)].
- c. Sulfur dioxide emissions from the stack shall not exceed 0.8 lb/MMBtu, based on a twenty-four (24)-hour average [401 KAR 59:015].

Compliance Demonstration:

This unit is considered to be in compliance with the particulate matter, sulfur dioxide, and opacity standards while burning natural gas.

- d. See Section D., Source Emission Limitations and Testing Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

The permittee shall monitor fuel usage (MMscf) source-wide, and for this emission unit, on a monthly basis [401 KAR 52:030, Section 10].

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of fuel usage (MMscf) source-wide, and for this emission unit, on a monthly basis [401 KAR 52:030, Section 10].

6. Specific Reporting Requirements:

See Section F., Monitoring, Recordkeeping, and Reporting Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 09

Seven Indirect Heat Exchangers

Description:

Seven (7) Natural Gas-fired Indirect Heat Exchangers

(Total Heat Input Capacity = 12.8 MMBtu/hr)

Construction Commenced: 2008 - 2009

6M1	2008	1.5
6M2	2008	1.5
6AR	2009	3.8
6K1	2009	1.5
6K2	2009	1.5
6G1	2009	1.5
6G2	2009	1.5

APPLICABLE REGULATIONS:

401 KAR 59:015, New Indirect Heat Exchangers

1. Operating Limitations:

See Section D., **Source Emission Limitations and Testing Requirements.**

2. Emission Limitations:

- a. Particulate matter emissions from each unit's stack shall not exceed 0.10 lb/MMBtu, based on a three (3)-hour-average [401 KAR 59:015].
- b. Emissions shall not exceed twenty (20) percent opacity, based on a six (6)-minute average, except [401 KAR 59:015]:
 1. A maximum of twenty-seven (27) percent opacity shall be permissible for not more than six (6) consecutive minutes during any sixty (60) consecutive minutes during cleaning the fire box or blowing soot.
 2. During building a new fire for the period required to bring the boilers up to operating conditions, provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- c. Sulfur dioxide emissions from each unit's stack shall not exceed 0.8 lb/MMBtu, based on a twenty-four (24)-hour average [401 KAR 59:015].

Compliance Demonstration:

These units are considered to be in compliance with particulate matter, sulfur dioxide, and opacity standards while burning natural gas.

- d. See Section D., **Source Emission Limitations and Testing Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

The permittee shall monitor fuel usage (MMscf) source-wide on a monthly basis [401 KAR 52:030, Section 10].

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of fuel usage (MMscf) source-wide on a monthly basis [401 KAR 52:030, Section 10].

6. Specific Reporting Requirements:

See Section F., Monitoring, Recordkeeping, and Reporting Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 10****Fifteen Natural Gas-fired Engines****Description:**

Fifteen (15) New Natural gas-fired emergency generator engines rated between 350kW and 8kW

(Total Power Capacity = 1873 kW)

Location	Power Output (kW)	Installed
Industrial Ed Bldg	25	2006
Downing/University Center	206	2006
Parking & Transportation	45	2006
South Campus - CC	70	2007
Health Services	50	2007
Florence Schneider Hall	36	2007
Academic Complex	206	2007
Mass Media & Tech	300	2008

Location	Power Output (kW)	Installed
Meredith/Zacharias Hall	60	2008
Science & Tech	150	2008
Van Meter Hall	150	2008
Snell Hall #1	250	2008
Snell Hall #2	250	2008
College of Education and Behavioral Sciences	70	2008
Jones-Jagger (propane)	25	2008

APPLICABLE REGULATIONS:

40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. However, these engines do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A, including initial notification requirements [40 CFR 63.6590(b)(3)(viii)].

NON-APPLICABLE REGULATIONS:

40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. These engines are exempt because they are emergency engines purchased prior to January 1, 2009 [40 CFR 60.4230(a)].

1. Operating Limitations:

See Section D., Source Emission Limitations and Testing Requirements.

2. Emission Limitations:

See Section D., Source Emission Limitations and Testing Requirements.

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

The permittee shall monitor fuel usage (MMscf) source-wide [401 KAR 52:030, Section 10].

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of fuel usage (MMscf) source-wide [401 KAR 52:030, Section 10].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

See Section F., Monitoring, Recordkeeping, and Reporting Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 11

Five Natural Gas-fired Engines

Description:

Five (5) Natural gas-fired emergency generator engines purchased in 2009 or later
(Total Power Capacity = 300 kW)

Location	Power Output (kW)	Construction Commenced
Keen Hall	25	2009
McCormack Hall	30	2010
Music Hall/Ivan Wilson Hall	70	2011
Downing/University Center	150	2012
Kentucky Building	25	2012

APPLICABLE REGULATIONS:

40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. However, these engines do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A, including initial notification requirements [40 CFR 63.6590(b)(3)(viii)].

1. Operating Limitations:

See Section D., Source Emission Limitations and Testing Requirements.

2. Emission Limitations:

- a. The permittee shall comply with the emission limitations in 40 CFR 60, Subpart JJJJ, Table 1 [40 CFR 60.4233(d)].

Compliance Demonstration Method:

The permittee shall demonstrate compliance by purchasing these engines certified according to procedures specified in 40 CFR 60, Subpart JJJJ, and operating and maintaining the engines and control devices according to the manufacturer's emission-related written instructions, and keeping records of conducted maintenance [40 CFR 60.4243(b)(1)].

- b. See Section D., Source Emission Limitations and Testing Requirements.

3. Testing Requirements:

N/A

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

4. Specific Monitoring Requirements:

The permittee shall monitor fuel usage (MMscf) source-wide [KAR 52:030, Section 10].

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of fuel usage (MMscf) source-wide [401 KAR 52:030, Section 10].

b. The permittee shall maintain records of maintenance performed on these units [40 CFR 60.4243(b)(1)].

6. Specific Reporting Requirements:

See Section F., Monitoring, Recordkeeping, and Reporting Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 12****Eight Diesel-fired Engines****Description:**

Eight (8) Diesel-fired Emergency Generator Engines
(Total power output = 2580 hp)

Location	Power Output (hp)	Installed
Agricultural Exposition Center	168	1979
Bames-Campbell Hall	268	2005
Diddle Arena	804	2002
Heat Plant	402	1981
Heat Plant	201	1995
Pearce-Ford Tower	201	2004
Minton Hall	268	2006
Bemis-Lawrence Hall	268	March 22, 2006

APPLICABLE REGULATIONS:

40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. However, these engines do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A, including initial notification requirements [40 CFR 63.6590(b)(3)(viii)].

NON-APPLICABLE REGULATIONS:

40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, applicable to units that commence construction after July 11, 2005 and are manufactured after April 11, 2006.

1. Operating Limitations:

N/A

2. Emission Limitations:

See Section D., Source Emission Limitations and Testing Requirements.

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

The permittee shall monitor hours of operation and fuel usage (gallons) for each unit [401 KAR 52:030, Section 10].

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of hours of operation and fuel usage (gallons) for each unit [401 KAR 52:030, Section 10].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

See Section F., Monitoring, Recordkeeping, and Reporting Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 13

Six Diesel-fired Engines

Description:

Six (6) Diesel-fired Emergency Generator Engines
(Total power output = 3437 hp)

Location	Power Output (hp)	Construction Commenced	Manufacture Date
Poland Hall	268	2007	May 16, 2006
Rodes-Harlin	268	2007	July 19, 2006
L.T. Smith Stadium	755	2007	June 2007
South Ave. (Portable #2)	538	2009	July 28, 2008
Data Center #1	804	2011	2011
Data Center #2	804	2011	2011

APPLICABLE REGULATIONS:

40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. However, these engines do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or 40 CFR 63, Subpart A, including initial notification requirements [40 CFR 63.6590(b)(3)(viii)].

1. Operating Limitations:

- a. The permittee shall install non-resettable hour meters prior to startup of the engines [40 CFR 60.4209(a)].
- b. The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) [40 CFR 60.4207(b)].

2. Emission Limitations:

- a. The permittee shall comply with the emission standards for new nonroad CI engines in 60.4202, for all pollutants, for the same model year and maximum engine power [40 CFR 60.4205(b)].

Compliance Demonstration:

The permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications [40 CFR 60.4211(c)].

- b. See Section D., **Source Emission Limitations and Testing Requirements.**
- c. The permittee shall meet the emission standards over the life of the engine [40 CFR 60.4206].

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

- a. The permittee shall monitor hours of operation and fuel usage (gallons) for each unit [401 KAR 52:030, Section 10].
- b. If any of these engines is equipped with a particulate matter filter, the permittee shall also install a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached [40 CFR 60.4209(b)].

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of hours of operation and fuel usage (gallons) for each unit [401 KAR 52:030, Section 10].

6. Specific Reporting Requirements:

See Section F., Monitoring, Recordkeeping, and Reporting Requirements.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

Description

Generally Applicable Regulation

1. Twenty-Three (23) Natural Gas-fired Indirect Heat Exchangers rated less than 1 MMBtu/hr
 (Total Heat Input Capacity = 8.43 MMBtu/hr)
 Construction commenced: After April 9, 1972

N/A

Location	Construction Commenced	Heat Input (MMBtu/hr)
Helm Library	2001	0.075
The Visitor Center	1989	0.076
Thompson North Wing	2007	0.076
Zacharias Hall	1991	0.26
Zacharias Hall	1991	0.8
Meredith Hall	1991	0.26
Meredith Hall	1991	0.8
J.T. Gilbert Hall	2000	0.8
Health Services	2007	0.065
Health Services	2007	0.065
South Campus	2007	0.75
Schneider Hall	2007	0.4
Schneider Hall	2007	0.4
Baseball Clubhouse #1	2009	0.1
Baseball Clubhouse #2	2009	0.1
Baseball Clubhouse #3	2009	0.1
Music Hall Humidifier	2011	0.42
Music Hall Boiler	2011	0.5
Music Hall Water Heater	2011	0.125
WKU Farm	2011	0.25
Downing Univ. Center	2013	0.8
Downing Univ. Center	2013	0.8

2. Dark Rooms

N/A

3. Wood Shop

401 KAR 59:010

4. Print Shop

401 KAR 59:010

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

- 5. Lab Hoods N/A
- 6. Degreaser 401 KAR 59:185
- 7. Ceramic Burner 401 KAR 63:020
- 8. 2 Sculpture Burners 401 KAR 63:020
- 9. Diesel Storage Tanks 401 KAR 63:010
- 10. Paint Spray Booth 401 KAR 59:010
- 11. Biodiesel Pilot Lab 401 KAR 59:010 & 401 KAR 63:020
- 12. Ceramics Studio Spray Booth 401 KAR 59:010
- 13. Wood Kiln 401 KAR 59:010
- 14. 19 Natural Gas-fired engines N/A
Totalling 1141 Kw

These engines are existing units [40 CFR 63.6590(a)(1)(iii)]. They are exempt from 40 CFR 63, Subpart ZZZZ [40 CFR 63.6585(f)(3)].

Location	Power Output (kW)	Installed
Tate Page Hall	25	1970
Cravens Graduate Center	75	1971
Enviro Science & Tech Bld	15	1975
Potter Hall	20	1991
Preston/Health/ Center	60	1992
Helm Library	25	1998
Gilbert Hall	19	1999
Wetherby Hall	100	1999
Thompson Complex North	8	2000
University Police	25	2000

Location	Power Output (kW)	Installed
Grise Hall	20	2001
Southwest Hall	30	2001
Northeast Hall	30	2001
McLean Hall	19	2002
Eng & Bio Science	350	2003
ICSET	175	2004
Pearce-Ford Tower	100	2004
Cherry Hall	15	2005
Parking Structure #2	30	2005

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Particulate matter, opacity, and sulfur dioxide emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. Total source-wide emissions of nitrogen oxides shall not exceed 90 tons per year, based on a twelve-month rolling total [to preclude 401 KAR 52:020].
4. Total source-wide emissions of carbon monoxide shall not exceed 90 tons per year, based on a twelve-month rolling total [to preclude 401 KAR 52:020].
5. Total source-wide emissions of carbon dioxide equivalent shall not exceed 90,000 tons per year, based on a twelve-month rolling total [to preclude 401 KAR 52:020 and 401 KAR 51:017].

Compliance Demonstration:

To demonstrate compliance with the source-wide operating limitations on nitrogen oxides, carbon monoxide, and carbon dioxide, total source-wide usage of natural gas shall not exceed 750 MMscf per year, based on a consecutive twelve (12)-month rolling total. The permittee shall monitor and maintain records of source-wide natural gas usage on a monthly basis. To demonstrate compliance with this emission limitation, the twelve (12)-month rolling total of natural gas usage shall be calculated monthly and reported quarterly (see Section F).

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place (as defined in this permit), and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030, Section 3(1)(f)1a, and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
3. In accordance with the requirements of 401 KAR 52:030, Section 3(1)f, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the six (6)-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030, Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within thirty (30) days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of each term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the Division for Air Quality, Bowling Green Regional Office, 2642 Russellville Rd., Bowling Green, KY 42101.
10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee. If a KYEIS emissions survey is not mailed to the permittee, then the permittee shall comply with all other emissions reporting requirements in this permit.
 11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
 - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
 - (1) The size and location of both the original and replacement units; and
 - (2) Any resulting change in emissions;
 - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
 - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
 - d. The replacement unit shall comply with all applicable requirements; and
 - e. The source shall notify Regional office of all shutdowns and start-ups.
 - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
 - (1) Re-install the original unit and remove or dismantle the replacement unit; or
 - (2) Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS**1. General Compliance Requirements**

- a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030, Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030, Section 12;
 - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030, Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-12 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within ninety (90) days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030, Section 11(3)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in this permit; and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030, Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030, Section 8(2)].

3. Permit Revisions

- a. Minor permit revision procedures specified in 401 KAR 52:030, Section 14(3), may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:030, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction is authorized by this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. Testing Requirements

- a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five (45) days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:030, Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;

SECTION G - GENERAL PROVISIONS (CONTINUED)

- (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
 - (5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
- b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030, Section 23(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030, Section 23(2)].
8. Ozone depleting substances
- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
 - b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 10162
Fairfax, VA 22038

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

SECTION I - COMPLIANCE SCHEDULE

N/A