

BOARD:
Allen Amsler
Chairman

Mark S. Lutz
Vice Chairman



Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

BOARD:
R. Kenyon Wells

L. Clarence Batts, Jr.

Ann B. Kirol, DDS

John O. Hutto, Sr., MD

June 29, 2012

Mitzi Stewart
Winthrop University
701 Oakland Avenue
Rock Hill, SC 29733

Re: Coverage to Operate Under the Terms and Conditions of the General Conditional Major Operating Permit for Fuel Combustion Operations

Dear Ms. Stewart:

Enclosed is the General Conditional Major Operating Permit for Fuel Combustion Operations that became effective on April 01, 2011. The federally enforceable emissions limitations and operational requirements contained within this General Conditional Major Operating Permit are designed to restrict this facility's potential to emit to below major source thresholds. This renewed General Conditional Major Operating Permit will be valid through March 31, 2021. Your facility's coverage under the terms and conditions of this permit shall be effective on June 29, 2012.

Please be advised that a new periodic reporting period begins upon the effective date of this renewed permit. Abbreviated periodic reports shall be completed and submitted in accordance with the previous permit's conditions and shall cover the interim period between the previous permit reporting period and the renewed permit reporting period. Reports required under the terms and conditions of this renewed Conditional Major Operating Permit must be completed and submitted in a timely manner in accordance with the periodic reporting schedule found in Part 4.B of this permit. The Department has developed an Excel spreadsheet that may help you in maintaining "Fuel Usage Records for General Conditional Major Operating Permit Reporting," which can be found at the following web site address:

http://www.scdhec.gov/environment/baq/docs/permitting/GPermitApps/Fuel_Record_Reporting_Worksheet.xls

It is important for you and/or an authorized representative responsible for the overall operation of this facility to read this issued permit carefully and to understand all requirements. If any errors or omissions are discovered, please notify Charles Beam of my staff, via e-mail at beamcp@dhec.sc.gov, or call 803-898-9524 immediately.

Pursuant to the South Carolina Administrative Procedures Act, any Department decision involving the issuance, denial, suspension, or revocation of a permit or certification may be appealed by the applicant, permittee, licensee, or affected person. Please see the enclosed "Notice of Appeal Procedure" for guidelines on filing an appeal.

Sincerely,

Elizabeth J. Basil
Director, Engineering Services Division
Bureau of Air Quality

EJB:AMH:kal

Enclosure

cc: Steve Moseley, Region 3, Lancaster EQC Office
Permit File: 2440-0084

ATTACHMENT A

Facility Information

Winthrop University

GCM-2440-0084

Page 2 of 7

D - EQUIPMENT INSTALLED

Equipment ID	Equipment Description	Fuels Used	Installation Date	Modification Date	Emission Point ID
CEB1	Central Energy Boiler #1 Babcock & Wilcox, Model FP-18 No. 44 rated at 84x10 ⁶ BTU/hr heat input; used for steam heat and hot water	Natural Gas No. 6 Fuel Oil (sulfur content less than or equal to 2.1%)	1963	1986	CEB1
CEB2	Central Energy Boiler #2 Babcock & Wilcox, Model FP-18 No. 44 rated at 84x10 ⁶ BTU/hr heat input; used for steam heat and hot water	Natural Gas No. 6 Fuel Oil (sulfur content less than or equal to 2.1%)	1963	1986	CEB2
CEB4	Central Energy Boiler #4 Miura, Model LX-300 rated at 11.81 x 10 ⁶ BTU/hr (equipped with low NO _x burners); used for steam heat and hot water	Natural Gas	2007	N/A	CEB4
CEB5	Central Energy Boiler #5 Miura, Model LX-300 rated at 11.81 x 10 ⁶ BTU/hr (equipped with low NO _x burners); used for steam heat and hot water	Natural Gas	2007	N/A	CEB5

E - EXEMPT SOURCES

Equipment ID	Equipment Description	Installation Date	Modification Date	Basis
DSG	Dalton Hall/Sims Science Diesel fired Generator, Caterpillar 27L, 896 HP, rated at 600 kW; used for building emergency systems	1999	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
TG	Tillman Hall Diesel fired Generator, John Deere 8.1 L, rated at 230 kW; used for information technology emergency power	2006	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
NCFP	North Campus Diesel fired Fire Pump, John Deere 6.8 L, rated at 210 HP (=156kW/1500 GPM); used for water-based fire suppression systems	2002	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
DT1	5,000 gallon No. 6 Fuel Oil Day-Use Tank #1; used as day-use tank for CEB1 and CEB2	1964	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)
ST1	100,000 gallon No. 6 Fuel Oil Storage Tank #1; alternate fuel storage for CEB1 and CEB2	1964	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)
ST2	68,000 gallon No. 6 Fuel Oil Storage Tank #2; alternate fuel storage for CEB1 and CEB2	1964	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)
ST3	68,000 gallon No. 6 Fuel Oil Storage Tank #3; alternate fuel storage for CEB1 and CEB2	1964	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)

ATTACHMENT A

Facility Information

Winthrop University

GCM-2440-0084

Page 3 of 7

E - EXEMPT SOURCES

Equipment ID	Equipment Description	Installation Date	Modification Date	Basis
LWB1	Lee Wicker Natural Gas fired Boiler rated at 1.124×10^6 BTU/hr; used for domestic hot water	1987	1999	S.C. Regulation 61-62.1, Section II(B)(2)(b)
RB1	Richardson Natural Gas fired Boiler rated at 1.124×10^6 BTU/hr; used for domestic hot water	1996	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
JHB1	Joynes Hall Natural gas fired Boiler #1 rated at 335,000 BUT/hr; used for domestic hot water	1985	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
DB1	Dinkins Hall Natural Gas fired 186,000 BTU/hr Boiler; used for domestic hot water	1968	2012	S.C. Regulation 61-62.1, Section II(B)(2)(b)
DHB	Dalton Hall Natural Gas fired Boiler rated at 8.66×10^6 BTU/hr; used for building heat	1999	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
JHHW	Johnson Hall Natural Gas fired Hot Water Heater rated at 300,000 BTU/hr; used for domestic hot water	1992	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
DHHW	Dalton Hall Natural Gas fired Hot Water Heater rated at 250,000 BTU/hr; used for domestic hot water	1999	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
SSHW	Sims Science Natural Gas fired Hot Water Heater rated at 300,000 BTU/hr; used for domestic hot water	2001	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
SEHW	Sellers House Natural Gas fired Hot Water Heater rated at 52,500 BTU/hr; used for domestic hot water	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
McBHW	McBryde Hall Natural Gas fired Hot Water Heater rated at 42,000 BTU/hr; used for domestic hot water	2004	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
SHGP1	Stewart House Natural Gas fired Gas Pack #1 rated at 200,000 BTU/hr; used for building heat	1992	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
SHGP2	Stewart House Natural Gas fired Gas Pack #1 rated at 125,000 BTU/hr; used for building heat	2012	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
SEGP	Sellers House Natural Gas fired Gas Pack rated at 75,000 BTU/hr; used for building heat	2006	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OSHW1	Old Stone House Natural Gas fired Hot Water Heater #1 rated at 40,000 BTU/hr; used for domestic hot water	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OSHW2	Old Stone House Natural Gas fired Hot Water Heater #2 rated at 40,000 BTU/hr; used for domestic hot water	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)

ATTACHMENT A

Facility Information

Winthrop University

GCM-2440-0084

Page 4 of 7

E - EXEMPT SOURCES

Equipment ID	Equipment Description	Installation Date	Modification Date	Basis
SYHW	Sykes House Natural Gas fired Hot Water Heater rated at 40,000 BTU/hr; used for domestic hot water	2004	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
WBHW	Workman Building Natural Gas fired Hot Water Heater rated at 75,000 BTU/hr; used for domestic hot water	N/A	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
SGP1	The Shack Natural Gas fired Gas Pack #1 rated at 125,000 BTU/hr; used for building heat	2011	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
SF	The Shack Natural Gas fired Furnace rated at 80,000 BTU/hr; used for building heat	Approx 2005	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
GRN	(13) Greenhouse Complex Natural Gas fired Heaters each rated at 80,000 BTU/hr; used for building heat	2002	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
FMGP1	Facilities Management Natural Gas fired Gas Pack #1 rated at 80,000 BTU/hr; used for building heat	Approx 1992	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
FMGP2	Facilities Management Natural Gas fired Gas Pack #2 rated at 80,000 BTU/hr; used for building heat	Approx 1992	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
PHF	President's House Natural Gas fired Furnace rated at 100,000 BTU/hr; used for building heat	Approx 1997	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OCH1	Operations Center Natural Gas fired Heater #1 rated at 250,000 BTU/hr; used for heating Structural Shop	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OCH2	Operations Center Natural Gas fired Heater #2 rated at 250,000 BTU/hr; used for building heat	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OCH3	Operations Center Natural Gas fired Heater #3 rated at 100,000 BTU/hr; used for building heat	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OCH4	Operations Center Natural Gas fired Heater #4 rated at 100,000 BTU/hr; used for building heat	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OCF1	Operations Center Natural Gas fired Furnace #1 rated at 100,000 BTU/hr; used for building heat	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OCGP1	Operations Center Natural Gas fired Gas Pack #1 rated at 220,000 BTU/hr; used for building heat	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
WBG1	Workman Building Natural Gas fired Gas Pack #1 rated at 150,000 BTU/hr; used for building heat	N/A	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)

ATTACHMENT A

Facility Information

Winthrop University

GCM-2440-0084

Page 5 of 7

E - EXEMPT SOURCES

Equipment ID	Equipment Description	Installation Date	Modification Date	Basis
WGBP2	Workman Building Natural Gas fired Gas Pack #2 rated at 115,000 BTU/hr; used for building heat	N/A	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
SACGP1	Student Activity Center Natural Gas fired Gas Pack #1 rated at 250,000 BTU/hr; used for building heat	1996	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
SACGP2	Student Activity Center Natural Gas fired Gas Pack #2 rated at 250,000 BTU/hr; used for building heat	1996	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
CHF1	Canterbury House Natural Gas fired Furnace #1 rated at 100,000 BTU/hr; used for building heat	2008	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
CHF2	Canterbury House Natural Gas fired Furnace #2 rated at 100,000 BTU/hr; used for building heat	2008	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OSF1	Old Stone House Natural Gas fired Furnace #1 rated at 60,000 BTU/hr; used for building heat	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
OSF2	Old Stone House Natural Gas fired Furnace #2 rated at 120,000 BTU/hr; used for building heat	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
LCR	Lake Complex Residence Natural Gas fired Gas Pack rated at 96,000 BTU/hr; used for building heat	Approx 2007	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
DHH	Dalton Hall Laboratory Hoods (28 hoods and 40 linear feet of bench-top ventilation); used for science education	1999	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(e)
SSH	Sims Sciences Laboratory Hoods (24 hoods and 46 linear feet of bench-top ventilation); used for science education	1961	2001	S.C. Regulation 61-62.1, Section II(B)(2)(e)
RK1	Rutledge Hall Ceramic Natural Gas fired Kiln #1 rated at 624,000 BTU/hr; used for ceramics education	1988	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)
RK2	Rutledge Hall Ceramic Natural Gas fired Kiln #2 rated at 336,000 BTU/hr; used for ceramics education	1988	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)
RK3	Rutledge Hall Ceramic Natural Gas fired Kiln #3 rated at 624,000 BTU/hr; used for ceramics education	1988	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)
RF	Rutledge Hall Natural Gas fired Forge rated at less than 10,000 BTU/hr; used for metalworking education	1988	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)
RH	Rutledge Hall Fume Hoods (2 hoods and 30 linear feet of bench-top ventilation); used for art education	1988	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(e)

ATTACHMENT A

Facility Information

Winthrop University

GCM-2440-0084

Page 6 of 7

E - EXEMPT SOURCES

Equipment ID	Equipment Description	Installation Date	Modification Date	Basis
WCD	(2) West Center Natural Gas fired Dryers rated at 120,000 BTU/hr each; used for towel drying at locker rooms	2007	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)
McBD	McBryde Hall Natural Gas fired Hot Water Booster for Commercial Dishwasher rated at 130,000 BTU/hr; used for special event dishwashing at McBryde Hall	N/A	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(h)
CCFP	Central Campus Diesel fired Fire Pump, Cummings 5.9L, rated at 115 HP (=85 kW/1500 GPM); used for water-based fire suppression systems	2007	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
DG	Dinkins Hall Natural Gas fired Generator rated at 25 kW; used for building emergency systems	2004	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
MusG	School of Music Diesel fired Generator, John Deere 2.4 L, rated at 100 kW; used for building emergency systems	2008	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
JHG	Johnson Hall Natural Gas fired Generator rated at 50 kW; used for building emergency systems	1992	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
GG	Good Building Natural Gas fired Generator rated at 25 kW; used for Campus Police emergency power	2004	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
WCG	West Center Natural Gas fired Generator rated at 30 kW; used for building emergency systems	2007	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
OHG	Owens Hall Diesel fired Generator, Caterpillar 4.4 L, rated at 60 kW; used for building emergency systems	2007	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
OCG	Operations Center Natural Gas fired Generator rated at 17 kW; used for environmental controls emergency power	2005	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
DCG	DiGiorgio Center Natural Gas fired Generator, Kohler 8.1 L rated at 150 kW; used for building emergency systems	2010	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)
DHG	Dalton Hall Greenhouse Natural Gas fired Heater rated at 200,000 BTU/hr; used for building heat	1999	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
BDG1	Biology Department Greenhouse Heater #1 rating unknown (label unreadable), has only one burner; used for building heat	Pre-1993	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
BDG2	Biology Department Greenhouse Heater #2 rated at 20,000 BTU/hr; used for supplemental building heat	2007	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)

ATTACHMENT A

Facility Information

Winthrop University

GCM-2440-0084

Page 7 of 7

E - EXEMPT SOURCES

Equipment ID	Equipment Description	Installation Date	Modification Date	Basis
THW	Tennis Complex Natural Gas fired Hot Water Heater rated at 240,000 BTU/hr; used for domestic hot water	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
AGP1	Archives Natural Gas fired Gas Pack #1 rated at 250,000 BTU/hr; used for building heat	2011	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
AGP2	Archives Natural Gas fired Gas Pack #2 rated at 125,000 BTU/hr; used for building heat	2011	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
AGP3	Archives Natural Gas fired Gas Pack #3 rated at 150,000 BTU/hr; used for building heat	2011	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
CB1	York Shipley Model SPW-20 Natural Gas fired Boiler rated at 8.3×10^6 BTU/hr; used for building heat	1981	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
CHW1	Coliseum Natural Gas fired Hot Water Heater #1 rated at 540,000 BTU/hr; used for domestic hot water	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
CHW2	Coliseum Natural Gas fired Hot Water Heater #2 rated at 540,000 BTU/hr; used for domestic hot water	2003	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(b)
CG	Coliseum Natural Gas fired Generator rated at 100 kW; used for building emergency systems	1982	N/A	S.C. Regulation 61-62.1, Section II(B)(2)(f)

F - CONDITIONS

Condition Number	Equipment/ Control Device ID	Regulated Pollutant/ Standard	Conditions
N/A	N/A	N/A	N/A

ATTACHMENT B

Modeled Emission Rates

Winthrop University

GCM-2440-0084

Page 1 OF 1

The emission rates listed herein are not considered federally enforceable limitations but are used to evaluate ambient air quality impact. Until the Department makes a determination that a facility is causing or contributing to an exceedance of a state or federal ambient air quality standard, increases to these emission rates are not in themselves considered violations of these ambient air quality standards.

AMBIENT AIR QUALITY STANDARDS - STANDARD NO. 2					
Emission Point ID	Modeled Emission Rates (lbs/hr)				
	PM	PM₁₀	SO₂	NO₂	CO
CEB1 - Central Energy Boiler 1	13.450	11.770	184.60	30.800	7.0600
CEB2 - Central Energy Boiler 2	13.450	11.770	184.60	30.800	7.0600
CEB4 - Central Energy Boiler 4	0.0900	0.0900	0.0070	0.5900	0.9900
CEB5 - Central Energy Boiler 5	0.0900	0.0900	0.0070	0.5900	0.9900
MS1 - Math / Science Boiler	0.0660	0.0660	0.0052	0.8660	0.7270
TCB1 - Thomson Cafeteria Boiler	0.0180	0.0180	0.0014	0.2340	0.1970
BB1 - Bancroft Boiler	0.0150	0.0150	0.0012	0.2000	0.1680

CLASS II PREVENTION OF SIGNIFICANT DETERIORATION - STANDARD NO. 7			
Emission Point ID	Modeled Emission Rates (lbs/hr)		
	PM₁₀	SO₂	NO_x
CEB4 - Central Energy Boiler 4	0.0880	0.0070	0.5800
CEB5 - Central Energy Boiler 5	0.0880	0.0070	0.5800
MS1 - Math / Science Boiler	0.0650	0.0050	---
BB1 - Bancroft Boiler	0.0150	0.0010	---