COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
VALLEY REGIONAL OFFICE
4411 Early Road, P.O. Box 3000, Harrisonburg, Virginia 22801
(540) 574-7800 Fax (540) 574-7878
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Amy Thatcher Owens
Regional Director

August 8, 2012

Mrs. Towana Moore
Vice-President of Business Services
James Madison University
181 Patterson Street MSC 0501
Harrisonburg, VA 22807

Location: City of Harrisonburg
Registration No.: 80117
Plant ID No.: 51-660-0005

Dear Mrs. Moore:

Attached is a permit to operate the James Madison University Campus pursuant to 9 VAC 5 Chapter 80, Article 1, of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the state operating permit dated March 3, 2003, as amended April 10, 2010, January 31, 2011, and April 15, 2011.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on December 1, 2011 and solicited written public comments by placing a newspaper advertisement in the Harrisonburg *Daily News-Record* on June 22, 2012. The thirty-day comment period, provided for in 9 VAC 5-80-270, expired on July 22, 2012. No comments were received.

This permit approval shall not relieve James Madison University of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult this and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia, at http://www.courts.state.va.us/courts/scv/rules.html, for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Debbie Medlin of the Valley Regional Office at (540) 574-7809, or via electronic mail at Debbie.Medlin@deq.virginia.gov.

Sincerely,

//B. Keith Fowler//

B. Keith Fowler
Deputy Regional Director

Attachments: Permit
40 CFR 60, Subpart Dc (via electronic attachment)
40 CFR 60, Subpart IIII (via electronic attachment)
40 CFR 63, Subpart ZZZZ (via electronic attachment)

c. Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AP20), U.S. EPA, Region III
Inspector – Air Compliance (Glenn Diehl)

Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	James Madison University
Facility Name:	James Madison University
Facility Location:	James Madison University Campus, Harrisonburg
Registration Number:	80117
Permit Number:	VRO80117

August 9, 2012

Effective Date

August 8, 2017

Expiration Date

for //B. Keith Fowler//

Regional Director

August 8, 2012

Signature Date

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Source Testing Report Format, 1 page
Attachment A, MACT/NSPS Generator Groups, 7 pages

Table of Contents

I. Facility Information

Permittee
James Madison University
800 South Main Street
Harrisonburg, Virginia 22801

Responsible Official
Towana Moore
Vice-President of Business Services

Facility
James Madison University
800 South Main Street
Harrisonburg, Virginia 22801

Contact Person
Dennis Hart
Manager, Power Plant
540-568-6235

County-Plant Identification Number: 51-660-0005

Facility Description:

SIC Code: 8200 – Educational Institutions

NAICS Code: 611310 – Colleges, Universities and Professional Schools

James Madison University (JMU) is a publicly funded institute for higher education located in Harrisonburg, Virginia. JMU's campus facilities include classrooms, dormitories, laboratories, athletic complexes, research facilities, and various support facilities. Emissions sources at JMU consist of a Power Plant (main heating plant) and North Campus Facility, other fuel burning equipment, and emergency generators.

JMU is considered to be part of a single source in conjunction with the Harrisonburg Resource Recovery Facility (RRF), VRO81016, for purposes of determining applicability of requirements for the prevention of significant deterioration (PSD) and Title V operating permit programs. Future modification of the two facilities that make up the single source must be addressed together to calculate net emission increases for comparison with PSD significance levels.

Power Plant and North Campus Facility

The Power Plant currently consists of a total of three boilers to produce steam for heat and related university operations.

- Two English natural gas and distillate oil-fired boilers, each with a maximum rated heat input capacity of 97.1 MMBtu/hr when burning natural gas and 92.6 MMBtu/hr when burning distillate oil, B-5 Biodiesel and B-20 biodiesel (Boilers B1 and B2).

- English distillate oil, B-5 biodiesel, B-20 biodiesel, and natural gas-fired boiler with a maximum rated heat input capacity of 50 MMBtu/hr (Boiler B5)

The North Campus Facility consists of a total of three boilers. The boilers are as follows:

- Three Dunham Bush distillate oil and natural gas-fired boilers, model 301-H-400, rated at 16.8 MMBtu/hr (Boiler B6, B7, and B8)

Other Fuel Burning Equipment

Due to the extensive nature of the JMU academic campus, it is not feasible for the Power Plant and the North Campus Facility to provide heat and steam to all of the contiguous buildings. Therefore, some facilities maintain separate hot water heaters and small boilers for the purposes of providing building heat and hot water. These smaller units burn distillate oil, natural gas, or liquefied petroleum gas (LPG).

Emergency Generators

JMU maintains emergency electrical generators across campus. The generators are fueled with diesel fuel (distillate oil), natural gas, or LPG. The generators range in size up to 750 kilowatts (kW). Operation of each electrical emergency generator is limited to no more than 250 hours each year.

II. Emission Units

Equipment to be operated consists of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Main Heating Plant							
B1	S-1	Water Tube boiler, natural gas-fired, English (2011)	97.1 MMBtu/hr	Flue-gas recirculation (FGR) system, Low NO_x Burner	B1_PCD	NO_x	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
		Water Tube boiler, distillate oil, B-5 and B-20 biodiesel-fired English (2011)	92.6 MMBtu/hr				
B2	S-1	Water Tube boiler, natural gas-fired, English (2011)	97.1 MMBtu/hr	Flue-gas recirculation (FGR) system, Low NO_x Burner	B2_PCD	NO_x	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
		Water Tube boiler, distillate oil, B-5 and B-20 biodiesel-fired, English (2011)	92.6 MMBtu/hr				
B5	S-1	English Boiler, natural gas, distillate oil, B-5 and B-20 biodiesel-fired (1991)	50 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
North Campus Facility							
B6	S-2	Dunham Bush Boilers, Model 301-H-400, natural gas, distillate oil, B-5 and B-20 biodiesel-fired (1967)	16.8 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
B7	S-2	Dunham Bush Boilers, Model 301-H-400, natural gas, distillate oil, B-5 and B-20 biodiesel-fired (1967)	16.8 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
B8	S-2	Dunham Bush Boilers, Model 301-H-400, natural gas, distillate oil, B-5 and B-20 biodiesel-fired (1967)	16.8 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
Other Fuel Burning Equipment							
FB1: distillate oil-fired units							
FB1-43	FB1-43-1	Beckett, #2 fuel oil,	0.13 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB1-91	FB1-91-1	Warm Air, #2 Fuel Oil, boiler/hot water heater	0.10 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB1-92	FB1-91-1	Warm Air, #2 fuel oil, boiler/hot water heater	0.10 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB1-93	FB1-93-1	Armstrong 0.85 GPM #2 Fuel Oil boiler/hot water heater	0.11 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB1-94	FB1-93-1	Armstrong 0.85 GPM #2 Fuel Oil, boiler/hot water heater	0.11 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB1-95	FB1-95-1	Thermo Products, #2 Fuel Oil, boiler/hot water heater	0.12 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB1-96	FB1-95-1	Warm Air, #2 Fuel Oil, boiler/hot water heater	0.15 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB1-97	FB1-95-1	Warm Air, #2 Fuel Oil, boiler/hot water heater	0.10 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB1-124	FB1-124-1	Whirlpool 1.12 GPH #2 Fuel Oil, boiler/hot water heater	0.15 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
FB2: LPG-fired units							
FB2-89	FB2-89-1	Payne PG9MAA, LPG boiler/hot water heater	0.10 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB2-90	FB2-90-1	Payne PG9MAA, LPG boiler/hot water heater	0.10 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB2-123	FB2-123-1	Omega Radiant Heater, LPG boiler/ hot water heater	0.35 MMBtu/hr	-	-	-	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB2-A123	FB2-123-1	Omega Radiant Heater, LPG boiler/ hot water heater	0.35 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB2-125	FB2-125-1	Dayton LPG boiler/hot water heater	0.12 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3: Natural gas-fired units							
FB3-3	FB3-3-1	Kewanee, Natural gas boiler/ hot water heater	1.75 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-4	FB3-3-1	Kewanee, Natural gas boiler/ hot water heater	1.75 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-6	FB3-6-1	Burnham 4FW-92-40LB Natural gas boiler/ hot water heater	0.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-7	FB3-6-1	Burnham 4FW-92-40LB Natural gas boiler/ hot water heater	0.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-8	FB3-6-1	PVI 1710N175A-UTP Natural gas boiler/ hot water heater	1.24 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-149	FB3-149-1	Patterson-Kelley, Natural gas boiler/ hot water heater	1.0 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
FB3-150	FB3-149-1	Patterson-Kelley, Natural gas boiler/ hot water heater	1.0 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-13	FB3-13-1	Superior 500A-V-5-0, Natural gas boiler/ hot water heater	2.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-14	FB3-13-1	Superior 500A-V-5-0, Natural gas boiler/ hot water heater	2.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-16	FB3-16-1	Patterson-Kelley N-1900 Natural gas boiler/ hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-17	FB3-16-1	Cleaver-Brooks CB200-60 Natural gas boiler/ hot water heater	2.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-224	FB3-224-1	Patterson-Kelley Boiler/hot water heater	2.00 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-225	FB3-225-1	Patterson-Kelley Boiler/hot water heater	2.00 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-226	FB3-226-1	Patterson-Kelley Boiler/hot water heater	2.00 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-232	FB3-232-1	Patterson-Kelley Boiler/hot water heater	2.00 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-233	FB3-233-1	Precision hot water heater	1.54 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-234	FB3-234-1	Precision hot water heater	1.54 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-235	FB3-235-1	Various kitchen equipment	2.36 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
FB3-23	FB3-23-1	Patterson-Kelley N-1900 boiler / hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-24	FB3-23-1	Patterson-Kelley N-1900 boiler / hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-26	FB3-26-1	Bailey Kiln 5H-2B-5-1 Oven / kiln	0.35 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-27	FB3-27-1	Marvin kiln	0.20 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-28	FB3-28-1	Weil-McLain BGL139 WF boiler / hot water heaters	3.46 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-29	FB3-28-1	Weil-McLain BGL139 WF boiler / hot water heaters	3.46 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-31	FB3-31-1	(4) Modine 160,000 BTU boiler/ hot water heaters	0.64 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-32	FB3-32-1	Patterson-Kelley N-1900 boiler/ hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-33	FB3-32-1	Patterson-Kelley N-1900 boiler/ hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-36	FB3-36-1	(10) Hastings GF-1505	1.60 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-37	FB3-37-1	Patterson-Kelley N-1900 boiler/ hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-38	FB3-37-1	Patterson-Kelley N-1900 boiler/ hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-44	FB3-44-1	Cleaver-Brooks CB200-60 boiler/ hot water heater	2.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
							4/15/11
FB3-45	FB3-44-1	Patterson-Kelley N-1900 boiler/ hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-50	FB3-50-1	WELL-McLain PFG-6-PIN boiler/hot water heater	0.30 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-51	FB3-51-1	Burnham 4FW-180-50LB boiler/hot water heater	1.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-52	FB3-51-1	Burnham 4FW-180-50LB boiler/hot water heater	1.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-53	FB3-53-1	Patterson-Kelley N-1900 boiler/ hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-56	FB3-56-1	Patterson-Kelley N-1900 boiler/ hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-236	FB3-56-1	Patterson-Kelley N-1900 boiler/ hot water heater	2.00 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-59	FB3-59-1	Cleaver-Brooks CB200-60 boiler/ hot water heater	2.09 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-60	FB3-59-1	Cleaver-Brooks CB200-60 boiler/ hot water heater	2.09 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-62	FB3-62-1	Cleaver-Brooks CB200-60 boiler/ hot water heater	2.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-63	FB3-62-1	Cleaver-Brooks CB200-60 boiler/ hot water heater	2.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-64	FB3-64-1	Burnham 4FW12750LB boiler/hot water heater	1/06 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
FB3-65	FB3-64-1	Burnham 4FW12750LB boiler/hot water heater	1.06 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-243	FB3-64-1	Patterson-Kelley N-1500 boiler/ hot water heater	1.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-69	FB3-69-1	Burnham 4FW-127-40LB boiler/ hot water heater	1.33 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-70	FB3-69-1	Burnham 4FW-180-50LB boiler/hot water heater	1.33 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-71	FB3-69-1	Patterson-Kelly N-1900 boiler/hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-A19	FB3-A19-1	Kewanee L3S-100-GO boiler/hot water heater	3.34 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-A20	FB3-A19-1	Kewanee L3S-100-GO boiler/hot water heater	3.34 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-A21	FB3-A19-1	Kewanee L3S-100-GO boiler/hot water heater	3.34 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-A22	FB3-A22-1	Kewanee L3S-100-GO boiler/hot water heater	4.18 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-A23	FB3-A22-1	Patterson-Kelley N1500-MFD boiler/ hot water heater	1.50 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-A24	FB3-A22-1	Patterson-Kelley 531-5 boiler/ hot water heater	0.65 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-219	FB3-219-1	Patterson-Kelley N2000-MFD boiler/ hot water heater	2.00 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-220	FB3-219-1	Patterson-Kelley N2000-MFD boiler/ hot water heater	2.00 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
							4/15/11
FB3-221	FB3-219-1	Patterson-Kelley N2000-MFD boiler/ hot water heater	2.00 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-229	FB3-229-1	AO Smith Model BTF-80 boiler/ hot water heater	0.08 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-230	FB3-229-1	AO Smith Model BTF-80 boiler/ hot water heater	0.08 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-114	FB3-114-1	Weil-McClain BGL1292WN boiler/ hot water heater	3.46 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-115	FB3-114-1	Weil-McClain BGL1292WN boiler/ hot water heater	3.46 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-239	FB3-239-1	Lochinvar Knight KBN-285 boiler/ hot water heater	0.20 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-240	FB3-239-1	Lochinvar Knight KBN-285 boiler/ hot water heater	0.20 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-132	FB3-132-1	Bryan Boiler AB-150-W-FDGO boiler/ hot water heater	1.20 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-133	FB3-132-1	Bryan Boiler AB-150-W-FDGO boiler/ hot water heater	1.20 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-134	FB3-134-1	AO Smith boiler/ hot water heater	0.20 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-135	FB3-134-1	AO Smith boiler/ hot water heater	0.20 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-138	FB3-138-1	Cleaver-Brooks CB200-60 boiler/ hot water heater	2.09 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
							4/15/11
FB3-139	FB3-138-1	Cleaver-Brooks CB200-60 boiler/ hot water heater	2.09 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-141	FB3-141-1	Cleaver-Brooks CBH-100-50A	2.09 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-142	FB3-141-1	Cleaver-Brooks CBH-100-50A	2.09 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-146	FB3-146-1	Cleaver-Brooks CBH-200-80	3.30 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-147	FB3-146-1	Patterson-Kelley N-1900 boiler/ hot water heater	1.90 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-A28	FB3-A28-1	Burnham boiler/ hot water heater	2.03 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-A29	FB3-A29-1	Burnham boiler/ hot water heater	0.66 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
FB3-A30	FB3-A30-1	Lochinvar RWN135PM boiler/ hot water heater	0.13 MMBtu/hr	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
Emergency (Electrical) Generators							
EG1: Distillate Oil-fired Units							
EG1-2	EG1-2-1	Olympian 97A0	80 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG1-1	EG1-1-1	Kohler GENSET 2ROZJ	20 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A01	EG1-A01-1	GENERAC GENSET 3420810100	50kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-151	EG1-151-1	KOHLER GENSET 40REOZJB	40 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-241	EG1-241-1	Cummins Generator DFEG	350 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A02	EG1-A02-1	Caterpillar 291-0361	125 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-11	EG1-11-1	ONAN GENSET 1256DGEA	125 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-19	EG1-19-1	OLYMPIAN GENSET D200P4	200 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A03	EG1-A03-1	KOHLER GENSET 275RE0ZJ	275 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A04	EG1-A04-1	Caterpillar C15	500 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG1-20	EG1-20-1	KOHLER GENSET 100ROZJ	100 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-21	EG1-21-1	KOHLER GENSET 20ROZJ81	20 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-22	EG1-22-1	ONAN GENSET 50DGCA	50 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-30	EG1-30-1	ONAN GENSET 125DGEA	125 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-223	EG1-223-1	Caterpillar D150-8	200 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-35	EG1-35-1	CATERPILLAR GENSET 3306	250 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A05	EG1-A05-1	OLYMPIAN GENSET D90P1	90 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-152	EG1-152-1	KOHLER GENSET 30REOZJ	30 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A06	EG1-A06-1	KOHLER GENSET 80REOZJ	80 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG1-49	EG1-49-1	CATERPILLAR GENSET SR4B	400				3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-54	EG1-54-1	ONAN GENSET 3000DA/15R/25663D	30 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-242	EG1-242-1	KOHLER GENSET 30REOZJB	30 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-61	EG1-61-1	CATERPILLAR GENSET 450ROZD71	450 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A07	EG1-A07-1	ONAN GENSET DNAF 5708892	30 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A08	EG1-A08-1	KOHLER GENSET 30REOZB	30 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A09	EG1-A09-1	KOHLER GENSET 230REOZJB	230 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-227	EG1-227-1	CATERPILLAR ENGINE C15	350 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A10	EG1-A10-1	ONAN GENSET	350 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG1-A11	EG1-A11-1	ONAN GENSET	750 kW	--	--	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-231	EG1-231-1	Caterpillar Engine D80-6	80 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A12	EG1-A12-1	ONAN GENSET DQDAA-5788716	250 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-98	EG1-98-1	ONAN GENSET 100-l30471A	100 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-100	EG1-100-1	KOHLER 50ZJ GENERATOR	50 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A13	EG1-A13-1	ONAN GENSET 125DGDK	125 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-222	EG1-222-1	Kohler Power 250REOZJD	250 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A14	EG1-A14-1	KATO LIGHT GENSET	125 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-102	EG1-102-1	Olympian GENSET D200P4	200 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG1-EG1		*Awaiting Construction*	300 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-108	EG1-108-1	KOHLER GENSET 250A0ZD71	250 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-228	EG1-228-1	Cummins Generator DSHAC	200 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A15	EG1-A15-1	KOHLER GENSET 30RE0ZJ	30 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A16	EG1-A16-1	OLYMPIAN GENSET D30P3	30 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-128	EG1-128-1	KOHLER GENSET 20R0ZJ71	20 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-131	EG1-131-1	GENERAC GENSET 96A-01251-S	125 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-136	EG1-136-1	KOHLER GENSET 20R0ZJ71	60 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A17	EG1-A17-1	KOHLER GENSET 20R0ZJ71	30 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG1-143	EG1-143-1	KOHLER GENSET 125ROZJ81	125 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-144	EG1-144-1	ONAN GENSET 35DGBB	35 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A18	EG1-A18-1	ONAN GENSET	25 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-145	EG1-145-1	ONAN GENSET	275 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A31	EG1-A31-1	ONAN 750DFJA	750 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG1-A32	EG1-A32-1	ONAN 350DFCC	350 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG2: LPG-fired Units							
EG2-12	EG2-12-1	KOHLER GENSET 33RZ282	33 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG2-15	EG2-15-1	KOHLER GENSET 20RZ	20 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG2-110	EG2-110-1	ONAN GENSET 5CCK/3CR/8747V	5 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3: Natural Gas-fired Units							
EG3-18	EG3-18-1	ONAN GENSET 15JCL	15 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3-25	EG3-25-1	ONAN GENSET 15JCL	15 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3-34	EG3-34-1	ONAN GENSET 15JCL	15 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3-39	EG3-39-1	KOHLER GENSET 10RZ82	10 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3-66	EG3-66-1	ONAN GENSET 45EML	45 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3-46	EG3-46-1	KOHLER GENSET 15JCL	10 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3-55	EG3-55-1	KOHLER GENSET 10RZ82	10 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG3-58	EG3-58-1	KOHLER GENSET 10RZ82	10 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3-113	EG3-113-1	KOHLER 328602	20 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3-137	EG3-137-1	KOHLER GENSET 189401-81	10 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11
EG3-140	EG3-140-1	KOHLER GENSET 10RZ82	10 kW	--	-	--	3/3/03, as amended 4/7/10, 1/31/11 and 4/15/11

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

III. Power Plant and North Campus Facility

A. Limitations

1. Emissions from the boilers B1 and B2 shall be controlled by low NO_x burners with flue gas recirculation and a NO_x performance of 30 ppmvd at three percent O_2 for natural gas. The low NO_x burners shall be installed and operated in accordance with manufacturer's specifications.
(9 VAC 5-80-110 and Condition 2 of 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

2. The approved fuels for the boilers B1, B2, B5, B6, B7 and B8 are natural gas, distillate oil, B-5 biodiesel, and B-20 biodiesel. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 3 of 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

3. The total combined throughput limit for the boilers B1, B2, B5, B6, B7 and B8 shall be no more than the following:

Approved Fuel Type	Quantity Allowed
Distillate Oil, B-5 Biodiesel and B-20 Biodiesel	900,000 gallons
Natural Gas	628×10^6 cubic feet

The throughput for each fuel shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month or the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 7 of 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

4. The distillate oil, B-5 biodiesel, and B-20 biodiesel shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for Grades 1 or 2 fuel oil:

Maximum sulfur content per shipment: 0.05%

B-5 BIODIESEL which meets the ASTM D396 specifications for Grades 1 or 2 (S500) diesel fuel:

Maximum sulfur content per shipment: 0.05%

B-20 BIODIESEL which meets the ASTM D7467 specifications for Grades 1 or 2 (S500) diesel fuel:

Maximum sulfur content per shipment: 0.05%

(9 VAC 5-80-110 and Condition 12 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

5. Hourly emissions from the operation of each of the boilers B1 and B2 shall not exceed the limits specified below:

Particulate Matter (includes condensable PM)	1.4 lbs/hr
PM-10 (includes condensable PM-10)	0.7 lbs/hr
Sulfur Dioxide	4.8 lbs/hr
Nitrogen Oxide (as NO_2)	13.5 lbs/hr
Carbon Monoxide	8.0 lbs/hr
Volatile Organic Compounds	0.5 lbs/hr

These emissions are derived from the estimated overall emissions contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions III.A.2, III.A.4, III.C.2 and III.C.3. (9 VAC 5-80-110, and Condition 14 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

6. Hourly emissions from the operation of the boiler B5 shall not exceed the limits specified below:

Particulate Matter (includes condensable PM)	0.7 lbs/hr
PM-10 (includes condensable PM-10)	0.4 lbs/hr
Sulfur Dioxide	2.6 lbs/hr
Nitrogen Oxide (as NO_2)	7.3 lbs/hr
Carbon Monoxide	4.1 lbs/hr

Volatile Organic Compounds	0.3 lbs/hr

These emissions are derived from the estimated overall emissions contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions III.A.2 and III.A.4.
9 VAC 5-80-110, and Condition 15 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

7. Hourly emissions from the operation of each of the boilers B6, B7, and B8 shall not exceed any of the limits specified below:

Particulate Matter (includes condensable PM)	0.3 lbs/hr
PM-10 (includes condensable PM-10)	0.1 lbs/hr
Sulfur Dioxide	0.9 lbs/hr
Nitrogen Oxide (as NO_2)	2.5 lbs/hr
Carbon Monoxide	1.4 lbs/hr
Volatile Organic Compounds	0.1 lbs/hr

These emissions are derived from the estimated overall emissions contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions III.A.2 and III.A.4.
(9 VAC 5-80-110, and Condition 16 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

8. Total emissions from the operation of boilers B1, B2, B5, B6, B7, and B8 shall not exceed the limits specified below:

Particulate Matter (includes condensable PM)	3.3 tons/yr
PM-10 (includes condensable PM-10)	2.8 tons/yr
Sulfur Dioxide	3.4 tons/yr
Nitrogen Oxide (as NO_2)	40.4 tons/yr
Carbon Monoxide	28.6 tons/yr

Volatile Organic Compounds	1.8 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions III.A.1, III.A.3, III.A.4, and III.B.1. (9 VAC 5-80-110, and Condition 17 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

9. Visible emissions from the boilers B1, B2, and B5 shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110, 9 VAC 5-50-410, and Condition 23 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

10. Visible emissions from the boilers B6, B7, and B8 shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110, 9 VAC 5-40-80, 9 VAC 5-50-410 and Condition 24 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

11. Except where this permit is more restrictive than the applicable requirement, boilers B1, B2, and B5 shall be operated in compliance with the requirements of 40 CFR 60, Subpart Dc.
(9 VAC 5-80-110, 9 VAC 5-50-410 and Condition 26 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

12. At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

    The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided, including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-80-110, 9 VAC 5-50-20 E and Condition 37 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

B. Monitoring and Recordkeeping

1. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil, B-5 biodiesel, and/or B-20 biodiesel. Each fuel supplier certification shall include the following:

   a. The name of the oil supplier;

   b. The date on which the distillate oil, B-5 biodiesel, and B-20 biodiesel was received;

   c. The quantity of distillate oil, B-5 biodiesel, and B-20 biodiesel delivered in the shipment;

   d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications ASTM D396 for Grades 1 or 2 Low Sulfur fuel oil or ASTM D975 for Grades 1 or 2 Ultra Low Sulfur fuel oil;

   e. A statement that the B-5 biodiesel complies with the American Society for Testing and Materials specifications ASTM D396 for Grades 1 or 2 fuel oil;

   f. A statement that the B-20 biodiesel complies with the American Society for Testing and Materials specifications ASTM D7467 for Grades 1 or 2 fuel oil;

   g. The sulfur content of the distillate oil;

   h. The sulfur content of the B-5 biodiesel, and;

   i. The sulfur content of the B-20 biodiesel.

   Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition III.A.4. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
   (9 VAC 5-80-110 and Condition 13 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

2. The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ. These records shall include, but are not limited to:

   a. Monthly and annual throughput of natural gas (in 10^6 cubic feet), distillate oil (in 10^3 gallons), B-5 biodiesel (in 10^3 gallons) and B-20 biodiesel (in 10^3 gallons) for each of the boilers B1, B2, B5, B6, B7, and B8. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.

   b. All fuel supplier certifications for the boilers.

   c. Scheduled and unscheduled maintenance, and operator training.

   d. Copies of reports submitted in accordance with Condition III.D.1.

   e. Results of all visible emissions evaluations and performance (stack) tests.

   These records shall be available on-site for inspection by the DEQ and shall be current for the most recent five years.
   (9 VAC 5-80-110, 9 VAC 5-50-50, 9 VAC 5-50-410, 40 CFR 60.48c(g) and Condition 32 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

C. Testing

1. The fuel burning equipment shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested in the breaching for each of the boilers B1, B2, and B5 past the boiler exit and prior to the entrance to the stack.

   (9 VAC 5-80-110, 9 VAC 5-50-30 F, and Condition 27 of the of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

2. An initial performance test shall be conducted on either boiler B1 or B2 for the following pollutant using the specified fuels and methods:

Emission Unit	Pollutant	Fuel	Test Method
Boiler B1 or B2	NO_x	Natural Gas	40 CFR 60, Appendix A, Method 7 or equivalent EPA-approved test method
Boiler B1 or B2	NO_x	B-20 Biodiesel	40 CFR 60, Appendix A, Method 7 or equivalent EPA-approved test method

   The test shall be conducted to determine compliance with the applicable emission limits contained in Condition III.A.1 and Condition III.A.5. For the natural gas, the test shall be performed within 60 days after achieving the maximum production rate at which the boilers will be operated, but in no event later than 180 days after start-up

of the boilers. For the B-20 biodiesel, the test shall be performed within 60 days after first use of the B-20 biodiesel.

The test shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the test are to be arranged with the DEQ. The permittee shall submit a test protocol(s) at least 30 days prior to testing. One copy of the test results shall be submitted to the DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110, 9 VAC 5-50-30, and Condition 28 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

3. An initial Visible Emissions Evaluation (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted on boilers B1 and B2 while the boilers are burning distillate oil. Each test shall consist of 30 sets of 24 consecutive observations (at 15-second intervals) to yield a six-minute average. The duration of the testing shall be three hours (30 – six minute averages) unless during the initial 60 minutes of observation all six-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent. In such case, the observation period will be reduced to 60 minutes. Other details of the test are to be arranged with the DEQ. The evaluation shall be performed and demonstrate compliance within 60 days after achieving the maximum production rate at which the boilers will be operated but in no event later than 180 days after start-up of the boilers. One copy of the test results shall be submitted to the DEQ within 60 days after test completion and shall conform to the test report format enclosed with this permit.

   One copy of the VEE shall be submitted to the U.S. Environmental Protection Agency at the following address:

   Associate Director
   Office of Air Enforcement (3AP20)
   U.S. Environmental Protection Agency
   Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029

   (9 VAC 5-80-110, 9 VAC 5-50-30, 9 VAC 5-80-1200, 9 VAC 5-50-410 and Condition 29 of the 3/3/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

4. Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations and/or performance (stack) tests on the boiler(s) B1and/or B2 to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the DEQ.
   (9 VAC 5-80-110, 9 VAC 5-30-30 G, and Condition 30 of the 3/3/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

D. Reporting

1. The permittee shall submit reports to the DEQ, within 30 days after the end of each semi-annual period. Each semi-annual report shall include the dates included in the semi-annual period and the following:

   a. Regarding fuel sulfur content, if no shipments of distillate oil were received during the semi-annual period, the semi-annual report shall include a statement that no distillate oil was received during the semi-annual period. If distillate oil was received during the semi-annual period, the report shall include:

      i. The name of the oil supplier;

      ii. 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, Subpart Dc;

      iii. The sulfur content or maximum sulfur content of the oil, indicating compliance with the fuel oil sulfur content as listed in Condition III.A.4;

      iv. A certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certification submitted represent all of the fuel combusted during the reporting period.

   One copy of the semi-annual report shall be submitted to the U.S. Environmental Protection Agency at the address specified below:

   Associate Director
   Office of Air Enforcement (3AP20)
   U.S. Environmental Protection Agency
   Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029

   (9 VAC 5-80-110, 9 VAC 5-50-50, 40 CFR 60.48c and Condition 31 of the 3/3/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

IV. Other Fuel Burning Equipment

A. Limitations

1. The approved fuel for the fuel burning units categorized under FB1 is distillate oil. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 4 of 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

2. The approved fuel for the fuel burning units categorized under FB2 is liquefied petroleum gas (LPG). A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 5 of 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

3. The approved fuel for the fuel burning units categorized under FB3 is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 6 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

4. The fuel burning units categorized under FB1 shall consume no more than 50,000 gallons of distillate oil per year combined, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 8 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

5. The fuel burning units categorized under FB2 shall consume no more than 50,000 gallons of liquefied petroleum gas per year combined, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 9 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

6. The fuel burning units categorized under FB3 shall consume no more than 300×10^6 cubic feet natural gas per year combined, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-110 and Condition 10 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

7. The distillate oil shall meet the specifications below:

   DISTILLATE OIL which meets the ASTM D396 specifications for numbers 1 or 2 fuel oil:

   Maximum sulfur content per shipment: 0.05%

   (9 VAC 5-80-110 and Condition 12 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

8. Total emissions from the operation of the fuel burning units categorized under FB1 shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	0.5 ton/yr

   These emissions are derived from the estimated overall emission contribution from the operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition IV.A.1, IV.A.7, and IV.B.1.
   (9 VAC 5-80-110 and Condition 18 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

9. Total emissions from the operation of the fuel burning units categorized under FB2 shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	0.5 ton/yr

   These emissions are derived from the estimated overall emission contribution from the operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions IV.A.2 and IV.A.5.
   (9 VAC 5-80-110 and Condition 19 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

10. Total emissions from the operation of the fuel burning units categorized under FB3 shall not exceed the limits specified below:

Particulate Matter	1.1 tons/yr
PM-10	1.1 tons/yr
Nitrogen Oxides (as NO_2)	15.0 tons/yr
Carbon Monoxide	12.6 tons/yr

Volatile Organic Compounds	0.8 tons/yr

These emissions are derived from the estimated overall emission contribution from the operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions IV.A.3 and IV.A.6.
(9 VAC 5-80-110 and Condition 20 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

11. Visible emissions from each fuel burning unit categorized under FB1, FB2, and FB3 shall not exceed 20 percent opacity except during one-six minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

    (9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-50-410, and Condition 25 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

B. Monitoring and Recordkeeping

1. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil to be burned in each boiler. Each fuel supplier certification shall include the following:

    a. The name of the fuel supplier;

    b. The date on which the distillate oil was received;

    c. The quantity of distillate oil delivered in the shipment;

    d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications ASTM D396 for grades 1 or 2 Low Sulfur fuel oil or ASTM D975 for grades 1 or 2 Ultra Low Sulfur fuel oil;

    e. The sulfur content of the distillate oil.

    Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition number IV.A.7. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
    (9 VAC 5-80-110 and Condition 13 of 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

2. The permittee shall keep records of the following:

a. Monthly and annual throughput of distillate oil (in 10^3 gallons) for the fuel burning units categorized under FB1. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period;

b. Monthly and annual throughput of liquefied petroleum gas (in 10^3 gallons) for the fuel burning units categorized under FB2. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period;

c. Monthly and annual throughput of natural gas (in 10^6 cubic feet) for the fuel burning units categorized under FB3. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period;

d. All fuel supplier certifications;

e. Scheduled and unscheduled maintenance and operator training;

f. Records of all visible emissions evaluations and performance (stack) tests.

These records shall be available on-site for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-110 and Condition 32 of the 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

C. Testing

1. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with the procedures approved by the DEQ.
(9 VAC 5-80-110)

V. Emergency Generators

The emergency generators, as used in Section V, are classified into the following listed groupings: "NSPS Group, MACT Group 1, MACT Group 2, MACT Group 3, MACT Group 4" and "MACT Group 5", which are delineated in Attachment A of the permit.

A. Limitations

1. The approved fuel for the fuel burning units categorized under EG1 is distillate oil. A change in the fuel may require a permit to modify and operate.

   (9 VAC 5-80-110 and Condition 4 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

2. The approved fuel for the fuel burning units categorized under EG2 is liquefied petroleum gas. A change in the fuel may require a permit to modify and operate.

   (9 VAC 5-80-110 and Condition 5 of 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

3. The approved fuel for the fuel burning units categorized under EG3 is natural gas. A change in the fuel may require a permit to modify and operate.

   (9 VAC 5-80-110 and Condition 6 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

4. Each emergency generator categorized under either EG1, EG2, or EG3 shall not operate more than 250 hours per year, calculated monthly as the sum of each consecutive 12-month period.

   (9 VAC 5-80-110 and Condition 11 of the 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

5. The distillate oil shall meet the specifications below:

   DISTILLATE OIL which meets the ASTM D975 specifications for numbers 1 or 2 fuel oil:

   Maximum sulfur content per shipment: 0.0015%

   (9 VAC 5-80-110 and Condition 12 of the 3/03/03 Permit as amended 4/7/10, 1/31/11, and 4/15/11)

6. Total emissions from the operation of the fuel burning units categorized under EG1 shall not exceed the limits specified below:

Particulate Matter	3.5 tons/yr
PM-10	3.5 tons/yr

Sulfur Dioxide	3.3 tons/yr
Nitrogen Oxides (as NO_2)	49.7 tons/yr
Carbon Monoxide	10.7 tons/yr
Volatile Organic Compounds	4.0 tons/yr

These emissions are derived from the estimated overall emission contribution from the operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions V.A.1, V.A.4, V.A.5, and V.B.4. (9 VAC 5-80-110 and Condition 21 of the 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

7. Total emissions from the operation of the fuel burning units categorized under EG3 shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	1.0 ton/yr

These emissions are derived from the estimated overall emission contribution from the operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions V.A.3 and V.A.4.
(9 VAC 5-80-110 and Condition 22 of the 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

8. Emissions from the operation of the specified emergency generators shall not exceed the limits specified below:

Nos.	New Source Performance Standards (g/kW-hr)		
	$NMHC + NO_x$	CO	PM
EG1-241, EG1-A04, EG1-227, EG1-A12, EG1-222, EG1-EG1, EG1-223, EG1-228	4.0	3.5	0.20
EG1-A02, EG1-231	4.0	5.0	0.30

Compliance with these emission limits may be determined by keeping records of engine manufacture data indicating compliance with these emission limits.
(9 VAC 5-80-110, 40 CFR 60.4205(b), 40 CFR 60.4202(b), 40 CFR 89.112, and 40 CFR 60.4211(c), and Condition 21 of the 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

9. Visible emissions from each fuel burning unit categorized under EG1, EG2 and EG3 shall not exceed 20 percent opacity except during one-six minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

   (9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-50-410, and Condition 25 of the 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

10. The operation of the emergency generators (NSPS Group and MACT Group 4) is limited to emergency situations. Emergency generators (NSPS Group and MACT Group 4) may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing is limited to 100 hours per year. For engines meeting standards under Condition V.A.8, any operation other than emergency operation, and maintenance and testing as permitted in 40 CFR 60 Subpart IIII, is prohibited. There is no time limit on the use of emergency stationary internal combustion engines (ICE) in emergency situations.

    (9 VAC 5-80-110, 40 CFR 63.6590 (c), 40 CFR 60.4211(f), and 40 CFR 60.4219)

11. The emergency stationary reciprocating internal combustion engines (RICE), MACT Group 2, must be operated in accordance with the following:

    a. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this condition, is prohibited.

    b. There is no time limit on the use of the emergency stationary RICE in emergency situations.

    c. You may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

d. You may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this condition, as long as the power provided by the financial arrangement is limited to emergency power.

(9 VAC 5-80-110 and 40 CFR 63.6640(f))

12. By May 3, 2013, the compression ignition (CI) engines (MACT Group 2) shall comply with the maintenance requirements specified in section 1 (a) through (c) of Table 2c to Subpart ZZZZ:

    a. Change oil and filter every 500 hours of operation or annually, whichever comes first, or at an extended frequency if utilizing an oil analysis program as described in §63.6625(i);

    b. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first; and

    c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first.

    (9 VAC 5-80-110, 9 VAC 5-60-90, 9 VAC 5-60-100, and 40 CFR 63.6595(a)(1)

13. By October 19, 2013, the spark ignition (SI) engines (MACT Group 5) shall comply with the maintenance requirements specified in section 6 (a) through (c) of Table 2c to Subpart ZZZZ:

    a. Change oil and filter every 500 hours of operation or annually, whichever comes first, or at an extended frequency if utilizing an oil analysis program as described in §63.6625(i);

b. Inspect spark plugs every 1000 hours of operation or annually, whichever comes first; and

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(9 VAC 5-80-110, 9 VAC 5-60-90, 9 VAC 5-60-100, and 40 CFR 63.6595(a)(1)

14. By May 3, 2013, for CI engines, and October 19, 2013 for SI engines, during periods of startup the permittee must minimize the time spend at idle for the emergency engines (MACT Group 2 and MACT Group 5) and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
(9 VAC 5-80-110, 40 CFR 63.6595(a)(1) and Table 2c to 40 CFR 63 Subpart ZZZZ)

15. The emergency generators (MACT Group 4) must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII for compression ignition engines.
(9 VAC 5-80-110 and 40 CFR 63.6590(c))

16. The permittee must maintain and operate the emergency generators (NSPS Group) according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the manufacturer, over the entire life of the engine. In addition, the permittee may only change those settings that are approved by the manufacturer.
(9 VAC 5-80-110, 40 CFR 63.6590(c), 40 CFR 60.4206, and 40 CFR 60.4211)

17. Except where this permit is more restrictive, the emergency generators (NSPS Group and MACT Group 4) shall be operated in compliance with the requirements of 40 CFR 60, Subpart IIII.
(9 VAC 5-80-110, 40 CFR 63.6590(c), and 40 CFR 60 Subpart IIII)

18. Except where this permit is more restrictive, the emergency generators (MACT Group 2, MACT Group 3 and MACT Group 5) shall be operated in compliance with the requirements of 40 CFR 63, Subpart ZZZZ.
(9 VAC 5-80-110 and 40 CFR 63 Subpart ZZZZ)

19. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the emergency generators in categories EG1, EG2, and EG3, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the operation of the emergency generator:

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

b. Maintain an inventory of spare parts.

c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-80-110 and Condition 37 of the 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11)

B. Monitoring and Recordkeeping

1. The permittee must install a non-resettable hour meter prior to the startup of the emergency generators (NSPS Group). The hour meter shall be provided with adequate access for inspection.

   (9 VAC 5-80-110, 40 CFR 63.6590 (c), and 40 CFR 60.4209)

2. By May 3, 2013 for CI engines, and October 19, 2013 for SI engines, the permittee shall install non-resettable hour meters on the existing emergency stationary RICE (MACT Groups 2 (existing CI) and 5 (existing SI)). The hour meter shall be provided with adequate access for inspection

   (9 VAC 5-80-110 and 40 CFR 63.6625 (f))

3. By May 3, 2013 for CI engines, and October 19, 2013 for SI engines, the permittee shall develop a maintenance plan for the emergency generators (MACT Groups 2 (existing CI) and 5 (existing SI)) that provides to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions.

   (9 VAC 5-80-110, 9 VAC 5-60-90, 9 VAC 5-60-100, and 40 CFR 63.6625 (e))

4. The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ. These records shall include, but are not limited to:

   a. All fuel supplier certifications.

   b. Written operating procedures and maintenance and training records as required by Condition V.A.19.

c. Results of all stack tests and visible emission evaluations.

d. Annual hours of emergency operation, maintenance and testing, and operation in non-emergency situations for the generators (MACT Group 2).

e. Annual hours of operation of the emergency generators (MACT Group 1, MACT Group 3, MACT Group 4, and NSPS Group) for emergency purposes, maintenance checks and readiness testing.

f. Scheduled and unscheduled maintenance, and operator training.

g. Records of engine manufacture data as required in Condition V.A.8.

h. Records of the maintenance conducted on the CI engines (MACT Group 2) after May 3, 2013 in order to demonstrate that each engine is operated and maintained according to the maintenance plan required by Condition V.B.3.

i. Records of the hours of operation of the CI engines (MACT Group 2) after May 3, 2013, and SI engines (MACT Group 5) after October 19, 2013, that are recorded on a non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation.

j. Annual hours of operation of each emergency generator categorized under EG1, EG2, or EG3, calculated monthly as the sum of each consecutive 12-month period.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-110, Condition 32 of the 3/03/03 Permit as amended 4/7/10, 1/31/11 and 4/15/11, and 40 CFR 63.6655 (e) and (f))

C. Testing

1. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with the procedures approved by the DEQ.
(9 VAC 5-80-110)

D. Reporting

1. The source must submit initial notification 120 days after start-up of the emergency generators (MACT Group 3) or within 120 days after the emergency generators (MACT Group 3) become subject to the standard. The initial notification must contain all the following information:

   a. The name and address of the owner or operator;

b. The address (i.e., physical location) of the affected source;

c. An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

d. A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted;

e. A statement of whether the affected source is a major source or an area source; and

f. A statement explaining that the stationary RICE has no additional requirements under 40 CFR 63 Subparts A or ZZZZ and an explanation of the basis of the exclusion.

One copy of the notification shall be submitted to the U.S. Environmental Protection Agency at the address specified below:

Associate Director
Office of Air Enforcement (3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110, 40 CFR 63.6645(f) and 40 CFR 63.9(b)(2))

VI. Hazardous Air Pollutant Conditions

Except where this permit is more restrictive, the permittee shall comply with 40 CFR Part 63 Subpart DDDDD (Industrial/Commercial/Institutional Boilers and Process Heater NESHAP) no later than the compliance date specified in the final rule. The permittee shall record and retain all information necessary to determine compliance with 40 CFR Part 63 Subpart DDDDD, as specified in the final rule. Notifications required by 40 CFR 63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) and 40 CFR Part 63 Subpart DDDDD shall be provided by the dates specified. Notifications shall be submitted to the DEQ. A copy of each notification shall be provided to EPA Region III, to the attention of the Industrial/Commercial/Institutional Boilers and Process Heater NESHAP Coordinator, at the following address:

EPA Region III
Air Enforcement Branch
3AP12
1650 Arch Street
Philadelphia PA 19103

(9 VAC 5-80-110 and 40 CFR 63 Subpart DDDDD)

VII. Insignificant Emission Units

The following emission units at the facility are identified as insignificant emission units under 9 VAC 5-80-720:

Petroleum Storage Tanks

Emission Unit Number	Capacity in gallons	Tank Construction	Use	Fuel Stored	Citation	Pollutant Emitted (9 VAC 5-80-720 B)
Free-Standing Aboveground Storage Tanks						
43_a	275	Steel	Heating	#2 Distillate (0.05%)	9 VAC 5-80-720 B	VOC
43_b	275	Steel	Heating	#2 Distillate (0.05%)	9 VAC 5-80-720 B	VOC
A18	50	Steel	Emerg. Power	Diesel (0.0015%)	9 VAC 5-80-720 B	VOC
A10	500	Steel	Emerg. Power	Diesel (0.0015%)	9 VAC 5-80-720 B	VOC
A31_day	275	Steel	Emerg Power	Diesel (0.0015%)	9 VAC 5-80-720 B	VOC
91-97	500	Steel	Heating	#2 Distillate (0.05%)	9 VAC 5-80-720 B	VOC
Underground Storage Tanks						
124	1000	Steel	Heating	#2 Distillate	9 VAC 5-80-720 B	VOC
B1_ B2_ B5_T1	50,000	Steel	Heating	#2 Distillate (0.05%)	9 VAC 5-80-720 B	VOC
B1_ B2_ B5_T2	50,000	Steel	Heating	B-20 Biodiesel	9 VAC 5-80-720 B	VOC
A11	8,000	Steel	Emerg. Power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A25-A27_a	10,000	Steel	Heating	#2 Distillate (0.05%)	9 VAC 5-80-720 B	VOC
A25-A27_b	20,000	Steel	Heating	#2 Distillate (0.05%)	9 VAC 5-80-720 B	VOC
A31_UST	3,000	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
Above Ground Belly Tanks or Tanks Located Within Generators						
241	500	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
61	550	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
1	100	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
11	100	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
19	150	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
20	350	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
21	100	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC

Emission Unit Number	Capacity in gallons	Tank Construction	Use	Fuel Stored	Citation	Pollutant Emitted (9 VAC 5-80-720 B)
22	100	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
30	100	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
35	500	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
49	150	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
54	50	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
98	75	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
102	250	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
228	200	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
128	120	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
131	250	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
108	325	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
136	200	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
143	250	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
144	50	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
100	150	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
152	100	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A08	50	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
2	50	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A16	112	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A01	250	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
151	200	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A03	300	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A04	660	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
223	278	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A05	194	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A06	85	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
242	119	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A17	140	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
227	595	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC

Emission Unit Number	Capacity in gallons	Tank Construction	Use	Fuel Stored	Citation	Pollutant Emitted (9 VAC 5-80-720 B)
A09	500	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A07	65	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A13	475	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
222	356	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A14	250	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A02	278	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A15	140	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A12	720	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
231	208	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
145	275	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC
A32	250	Steel	Emerg. power	#2 Distillate (0.0015%)	9 VAC 5-80-720 B	VOC

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None Identified	-	-

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

IX. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

   d. The analytical techniques or methods used.

   e. The results of such analyses.

   f. The operating conditions existing at the time of sampling or measurement.

   (9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
   (9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

   a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

   b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

      i Exceedance of emissions limitations or operational restrictions;

      ii Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

      iii Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

   c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

   (9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the DEQ, within four daytime business hours after discovery, of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3 of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the DEQ by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the DEQ.
(9 VAC 5-20-180 C)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board 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 request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
   (9 VAC 5-80-110 G.6)

2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
   (9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
(9 VAC 5-50-20 E)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator 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.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall

comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

   a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

   b. The permitted facility was at the time being properly operated.

   c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in the permit.

   d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F and H.
(40 CFR Part 82, Subparts A-F and H)

Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)

AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)

BB. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

SOURCE TESTING REPORT FORMAT

Report Cover
1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Test Dates.
4. Tester; name, address and report date

Certification
1. Signed by team leader/certified observer (include certification date)
2. Signed by responsible company official
3. *Signed by reviewer

Copy of approved test protocol

Summary
1. Reason for testing
2. Test dates
3. Identification of unit tested & the maximum rated capacity
4. *For each emission unit, a table showing:
    a. Operating rate
    b. Test Methods
    c. Pollutants tested
    d. Test results for each run and the run average
    e. Pollutant standard or limit
5. Summarized process and control equipment data for each run and the average, as required by the test protocol
6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
7. Any other important information

Source Operation
1. Description of process and control devices
2. Process and control equipment flow diagram
3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results
1. Detailed test results for each run
2. *Sample calculations
3. *Description of collected samples, to include audits when applicable

Appendix
1. *Raw production data
2. *Raw field data
3. *Laboratory reports
4. *Chain of custody records for lab samples
5. *Calibration procedures and results
6. Project participants and titles
7. Observers' names (industry and agency)
8. Related correspondence
9. Standard procedures

* Not applicable to visible emission evaluations

MACT (ZZZZ) Group 1 [§63.6590(a)(1)(i)]:

Existing Emergency Generators > 500 HP at Major Source of Hazardous Air Pollutants (HAP)

Ref. No.	Location	Manufacturer and/or Description	Date Installed (prior to 12/19/02)	Engine Size (kW)	Engine Size (HP)
EG1-A11	JMU Memorial Hall	ONAN GENSET	10/01/99	750	1135
EG1-A31	North Campus (Main Bldg)	ONAN 750DFJA	7/1/93	750	1135
EG1-49	Health Sciences A2	CATERPILLAR GENSET 71237406	12/99	400	587
EG1-61	ISAT (CISAT A-1)	CATERPILLAR GENSET 450ROZD71	6/97	450	603
EG1-A10	Memorial Hall	ONAN GENSET	10/99	350	535
EG1-A32	North Campus (Cancer Center)	ONAN GENSET	1/90	350	535

Requirements:

Existing >500 HP @ Major HAP – Must have commenced construction before 12/19/02 No initial notification is necessary.	§63.6590 (b)(3)(iii) – Does <u>not</u> have to meet the requirements of this subpart (ZZZZ) or subpart A.

MACT (ZZZZ) Group 2 [§63.6590(a)(1)(ii)], page 1 of 2:

Existing Emergency Generators ≤ 500 HP at Major Source of HAP

Ref. No.	Location	Manufacturer and/or Description	Date Installed (prior to 6/12/06)	Engine Size (kW)	Engine Size (HP)
EG1-2	Anthony Seeger	Olympian 97A0	12/97	80	107
EG1-1	Ashby Hall	Kohler GENSET 2ROZJ	7/00	20	27
EG1-A01	Athletic Center (APC)	GENERAC GENSET 3420810100	6/04	50	67
EG1-151	Bookstore	KOHLER GENSET 40REOZJB	3/93	40	54
EG1-11	Carrier Library #2	ONAN GENSET 1256DGEA	8/91	125	207
EG1-19	Chesapeake Hall	OLYMPIAN GENSET D200P4	10/00	200	325
EG1-A03	CISAT A3	KOHLER GENSET 275RE0ZJ	01/04	275	369
EG1-20	College Center	KOHLER GENSET 100ROZJ	08/01	100	134
EG1-21	Converse Hall	KOHLER GENSET 20ROZJ81	07/98	20	27
EG1-22	Convocation Center	ONAN GENSET 50DGCA	02/93	50	86
EG1-30	Eagle Hall	ONAN GENSET 125DGEA	07/92	125	207
EG1-35	Frye Hall	CATERPILLAR GENSET 3306	11/00	250	382
EG1-A05	Gibbons Hall	OLYMPIAN GENSET D90P1	06/98	90	121
EG1-152	Gifford Hall	KOHLER GENSET 30REOZJ	06/02	30	40
EG1-A06	Harrison Hall	KOHLER GENSET 80REOZJ	04/05	80	107
EG1-54	Hillside Residence Hall	ONAN GENSET 3000DA/15R/25663D	01/83	30	40
EG1-242	Hoffman Hall	KOHLER GENSET 30REOZJB	12/03	30	40
EG1-A07	JMAC3 (TELECOM)	ONAN GENSET DNAF 5708892	03/05	30	40
EG1-A08	Logan Hall	KOHLER GENSET 30REOZB	02/95	30	40
EG1-A09	Massanutten Hall	KOHLER GENSET 230REOZJB	12/05	230	308
EG1-108	Recreation Center	KOHLER GENSET 250A0ZD71	07/96	250	335

Requirements:

Subject to MACT ZZZZ: *Existing ≤500 HP @ Major HAP – Must have commenced construction before 6/12/06*	MACT ZZZZ Requirements: §63.6602 – Emission limits in Table 2c §63.6640(f)(1) – Restrictions on emergency use

MACT (ZZZZ) Group 2 [§63.6590(a)(1)(ii)], page 2 of 2:

Existing Emergency Generators ≤ 500 HP at Major Source of HAP

Ref. No.	Location	Manufacturer and/or Description	Date Installed (prior to 6/12/06)	Engine Size (kW)	Engine Size (HP)
EG1-98	Music Bldg	ONAN GENSET 100-l30471A	03/87	100	166
EG1-100	Parking Deck (Champions Drive)	KOHLER 50ZJ GENERATOR	06/01	50	67
EG1-A13	Parking Deck Warsaw	ONAN GENSET 125DGDK	03/06	125	207
EG1-A14	Phillips Hall	KATO LIGHT GENSET	03/05	125	168
EG1-102	Potomac Hall	Olympian GENSET D200P4	10/00	200	325
EG1-A15	Spotswood Hall	KOHLER GENSET 30RE0ZJ	8/04	30	40
EG1-A16	Stream Plant (TELECOM)	OLYMPIAN GENSET D30P3	4/04	30	40
EG1-128	Taylor Hall	KOHLER GENSET 20R0ZJ71	2/93	20	27
EG1-131	University Services Bldg	GENERAC GENSET 96A-01251-S	3/96	125	168
EG1-136	Wampler Hall	KOHLER GENSET 20R0ZJ71	12/93	60	80
EG1-A17	Wayland Hall	KOHLER GENSET 20R0ZJ71	1/05	30	40
EG1-143	Wilson Hall #1	KOHLER GENSET 125ROZJ81	10/91	125	168
EG1-144	Wilson Hall #2	ONAN GENSET 35DGBB	9/98	35	68
EG1-A18	WMRA	ONAN GENSET	10/88	25	34
EG1-145	Zane Showker Hall	ONAN GENSET	10/99	275	435

Requirements:

Subject to MACT ZZZZ: *Existing ≤500 HP @ Major HAP – Must have commenced construction before 6/12/06*	MACT ZZZZ Requirements: §63.6602 – Emission limits in Table 2c §63.6635(f)(1) – Restrictions on emergency use

MACT (ZZZZ) Group 3 [§63.6590(a)(2)(i)]:

New (after 12/19/02) Emergency Generators > 500 HP at Major Source of HAP

Ref. No.	Location	Manufacturer and/or Description	Date Installed (on or after 12/19/02)	Engine Size (kW)	Engine Size (HP)
EG1-A04	JMU CISAT Library	Caterpillar C15	2/1/07	500	779
EG1-241	JMU Bridgeforth Stadium	Cummins Generator DFEG	4/2010	350	755
EG1-227	JMU Massanutten Hall	Caterpillar Engine C15	4/30/2010	350	717

Requirements:

Subject to MACT ZZZZ: *New >500 HP @ Major HAP – Commenced construction on or after 12/19/02*	MACT ZZZZ Requirements: §63.6590 (b)(1)(i) – Does not have to meet the requirements of this subpart or subpart A, except for the initial notification requirements of §63.6645(f)

MACT Group 4 [§63.6590(a)(2)(ii)]:

New Emergency Generators ≤ 500 HP at Major Source of HAP

Ref. No.	Location	Manufacturer and/or Description	Date Installed (on or after 6/12/06)	Engine Size (kW)	Engine Size (HP)
EG1-A02	Burruss Hall	Caterpillar 291-0361	5/1/2007	125	168
EG1-223	JMU East Campus Dining Hall	Caterpillar D150-8	6/24/2009	200	268
EG1-231	Memorial Stadium	Caterpillar Engine D80-6	5/7/2009	80	107
EG1-A12	Miller Hall	ONAN GENSET DQDAA-5788716	4/2007	250	390
EG1-222	Performing Arts Center	Kohler Power 250REOZJD	4/30/2009	250	335
EG1-228	Shenandoah Hall	Cummins Generator DSHAC	4/30/2009	200	364
EG1-EG1	Power Plant	*Awaiting Construction*		300	

Requirements:

Subject to MACT ZZZZ: *New ≤500 HP @ Major Source of HAP – Commenced construction on or after 6/12/06*	MACT ZZZZ Requirements: §63.6590 (c)(6) – Must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII for compression ignition engines. No further requirements apply for such engines under this part.

MACT Group 5:

Existing Spark-ignition (SI) Emergency Generators ≤ 500 HP at Major Source of HAP

Ref. No.	Location	Manufacturer and/or Description	Date Installed (prior to 6/12/06)	Engine Size (kW)	Engine Size (HP)
EG2-12	Carrier Library #1	KOHLER GENSET 33RZ282	8/91	33	44
EG2-15	Chandler Hall	KOHLER GENSET 33RZ282	8/93	20	27
EG2-110	Roop Hall	ONAN GENSET 5CCK/3CR/8747V	11/85	5	7
EG3-18	Chappelear Hall	ONAN GENSET 15JCL	8/93	15	20
EG3-25	Dingldine Hall	ONAN GENSET 15JCL	8/93	15	20
EG3-34	Frederickson Hall	ONAN GENSET 15JCL	8/93	15	20
EG3-39	Garber Hall	KOHLER GENSET 10RZ82	8/93	10	13
EG3-66	Greek Row	ONAN GENSET 45EML	12/91	45	60
EG3-46	Hanson Hall	KOHLER GENSET 10RZ82	8/93	10	13
EG3-55	Huffman Hall	KOHLER GENSET 10RZ82	8/93	10	13
EG3-58	Ikenberry Hall	KOHLER GENSET 10RZ82	8/93	10	13
EG3-113	Shorts Hall	KOHLER 326602	8/93	20	27
EG3-137	Weaver Hall	KOHLER GENSET 189401-81	8/93	10	13
EG3-140	White Hall	KOHLER GENSET 10RZ82	8/93	10	13

Requirements:

Subject to MACT ZZZZ: *Existing ≤500 HP @ Major Source of HAP – Must have commenced construction before 6/12/06*	MACT Requirements: §63.6602 – Emission limits in Table 2c §63.6635(f)(1) – Restrictions on emergency use

NSPS (Subpart IIII) Group:

Emergency Generators constructed after 6/12/06 – Subject to NSPS, Subpart IIII

Ref. No.	Location	Manufacturer and/or Description	Date Installed (after 6/12/06)	Engine Size (kW)	Engine Size (HP)	Engine Model Year
EG1-241	JMU Bridgeforth Stadium	Cummins Generator DFEG	3/1/10	350	755	2009
EG1-A02	Burruss Hall	Caterpillar 291-0361	5/1/07	125	168	2007
EG1-A04	JMU CISAT Library	Caterpillar C15	2/1/07	500	779	2007
EG1-223	JMU East Campus Dining Hall	Caterpillar D150-8	6/24/09	200	268	2008
EG1-227	JMU Massanutten Hall	Caterpillar Engine C15	4/30/10	350	717	2009
EG1-231	Memorial Stadium	Caterpillar Engine D80-6	5/7/09	80	107	2009
EG1-A12	Miller Hall	ONAN GENSET DQDAA-788716	4/1/07	250	390	2007
EG1-222	Performing Arts Center	Kohler Power 250REOZJD	4/30/09	250	335	2008
EG1-228	Shenandoah Hall	Cummins Generator DSHAC	4/30/09	200	364	2008
EG1-EG1	Power Plant	*Awaiting Construction*		300	Not installed	