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COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES SOUTHCENTRAL REGION - FIELD OPERATIONS AIR QUALITY CONTROL PROGRAM



OPERATING PERMIT

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the rules and regulations of the Department of Environmental Resources, the Department hereby issues this permit for the operation of the air contamination source described below.

Permit No:	21-2009 RACT	Source & Air Cleaning Device: Two No. 2 Fuel Oil Fired		
Owner:	Pennsylvania Power & Light Company		Combustion Turbines	
Address:	Two North Ninth Street		(Pratt & Witney)	
	Allentown, PA 18101-1179			
Attention:	Mr. Lynn Ratzell	location:	West Shore Combustion Turbine Site	
	Manager, Invironmental Management		Cumberland County	
This permi	t is subject to the following conditions:		IT ROBBER	
1. Th	at the source and any associated air clean	ing devices	are to be:	
b.	operated in such a manner as not to cause in compliance with the specifications and Available Control Technology (RACT) plan; operated and maintained in a manner consist	conditions	of the Reasonabl UU .IIN 8 1995	
	maintenance practices.		good operating and DER-AIR QUALITY CONTROL DIV. OF PERMITS	
2. Th	is permit is valid only for the specific en	quipment, l	ocation and owner named above.	
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4.				
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Issued:	JUN 7 1995	9		
read:		3		

Southcentral Region 21-2009 EPA, Region III

Permits

PERMIT NO. 21-2009

PENNSYLVANIA POWER & LIGHT COMPANY

WEST SHORE COMBUSTION TURBINE SITE

Conditions, Continued

- 4. This operating permit is for the incorporation of the Department's NO_X and VOC Reasonably Available Control Technology (RACT) requirements (25 Pa. Code, §§129.91 through 129.95) for the West Shore Combustion Turbine Site.
- 5. The expiration date shown on this RAC1 operating permit is for State purposes. For Federal Enforcement purposes this operating permit shall remain in effect as part of the State Implementation Plan (SIP) until replaced and approved by the U.S. Environmental Protection Agency (EPA). The operating permit shall become enforceable by EPA upon its approval as a revision to the SIP.
- 6. Usage of No. 2 fuel oil in each of the two combustion turbines shall be limited to 8,760,000 gallons during any consecutive 12-month period.
- The two combustion turbines shall be operated and maintained in accordance with good air pollution prevention practices or control practices.
- 8. Records shall be maintained in accordance with 25 Pa. Code, §129.95 requirements.
- 9. An annual report containing monthly records of fuel usage and operating hours for the two combustion turbines shall be submitted to the Harrisburg District Supervisor. The report for January 1 through December 31 is due no later than March 1 of the following year for each operating year authorized by the operating permit or its renewal.

MMONWEALTH OF PENNSYLVA DEPARTMENT OF ENVIRONMENTAL RESOURCES BUREAU OF AIR QUALITY CONTROL



OPERATING PERMIT

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the rules and regulations of the Department of Environmental Resources, the Department hereby issues this permit for the operation of the air contamination source(s) described below.

Permit No.:	OP-49-0002	Source &	anthracite culm-fired
Owner:	Foster Wheeler Mt. Carmel, Inc.	Air	cogeneration facility, as
		Cleaning	described herein
Address:	Marion Heights Road	Device:	
	Marion Heights, PA 17832		
Attn:	Mr. Edward Schiefer	Location:	Mt. Carmel Township
	Plant Manager		Northumberland County

This permit is subject to the following conditions:

- 1. That the source(s) and any associated air cleaning device(s) are to be:
 - a. operated in such a manner as not to cause air pollution;
 - b. in compliance with the specifications and conditions of the applicable plan approval(s) issued:
 - c. operated and maintained in a manner consistent with good operating and maintenance practices.
- 2. This permit is valid only for the specific equipment, location and owner named above.

See attached for additional conditions.

Failure to comply with the conditions placed on this permit is a violation of Section 127.444. Violation of this or any other provision of Article III of the rules and regulations of the Department of Environmental Resources will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

Issued:

JUN 3 0 1995

Environmental Program Manager

ec: Harrisburg RACT File

Mr. Michael J. Cooper-Foster Wheeler Environmental Services

PERMIT CONDITIONS

PERMIT NO.: OP-49-0002

COMPANY: Foster Wheeler Mt. Carmel, Inc.

3. This Operating Permit incorporates Reasonably Available Control Technology (RACT) determinations as required by Title I provisions of the Clean Air Act Amendments and 25 PA Code 129.91 through 129.95 for a 623.5 million Btu/hour Foster Wheeler brand circulating fluidized bed (CFB) boiler, an 8.37 million Btu/hour propane-fired auxiliary boiler, a 187 horsepower No.2 fuel oil-fired emergency fire pump, a 5 million Btu/hour propane-fired water vaporizer, a 0.84 million Btu/hour propane-fired water vaporizer and two 25.1 million Btu/hour natural gas/propane/No.2 fuel oil fired greenhouse boilers.

- 5. If at any time the permittee causes, permits or allows any modification (as that term is defined in Chapter 121 of Title 25, the Rules and Regulations of the Department of Environmental Resources) of the aforementioned air contamination source(s), the operation and use of which is authorized by this permit, or causes, permits or allows any modifications, malfunction or removal of any air pollution control device required as a condition of this permit, then and in that event, this permit shall be suspended, and the permittee shall not thereafter continue to operate or use said air contamination source(s).
- 6. The aforementioned source(s) may be operated and used only so long as any associated air pollution control devices are operated and maintained in accordance with the specifications set forth in the respective plan approval(s), and the application(s) submitted for said plan approval(s) (as approved by the Department), and in accordance with any conditions set forth herein.

Conditions 7 through 12 herein pertain to the requirements of the RACT regulations specified in Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Resources as they apply to the sources identified in condition 3 herein.

- 7. Pursuant to the RACT regulations of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Resources, the nitrogen oxides (NOx) emissions from the 623.5 million Btu/hour Foster Wheeler brand circulating fluidized bed (CFB) boiler identified in condition 3 herein shall never exceed 0.3 pounds of NOx per million Btu of heat input (30 day rolling average).
- Pursuant to the presumptive RACT provisions of Section 129.93(c)(1) of Article III of the Rules and Regulations of the Department of Environmental Resources, the 8.37 million Btu/hour propane-fired

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COMPANY: Foster Wheeler Mt. Carmel, Inc.

auxiliary boiler, 5 million Btu/hour propane-fired water vaporizer and 0.84 million Btu/hour propane-fired water vaporizer identified in condition 3 herein shall be maintained and operated in accordance with the manufacturer's specifications. The sources shall also be operated and maintained in accordance with good air pollution control practices.

- 9. Pursuant to the presumptive RACT provisions of Section 129.93(c)(5) of Article III of the Rules and Regulations of the Department of Environmental Resources, the 187 horsepower No.2 fuel oil-fired emergency fire pump identified in condition 3 herein shall operate less than 500 hours in any consecutive 12-month period and shall be maintained and operated in accordance with the manufacturer's specifications. The source shall also be operated and maintained in accordance with good air pollution control practices.
- 10. The two 25.1 million Btu/hr natural gas/propane/No.2 fuel oil fired greenhouse boilers identified in condition 3 herein shall be maintained and operated in accordance with the presumptive RACT provisions of Section 129.93(b)(2),(3),(4) and (5) of Article III of the Rules and Regulations of the Department of Environmental Resources. The sources shall also be operated and maintained in accordance with good air pollution control practices.
- 11. The company shall perform at least 3 volatile organic compound source tests on the fluidized bed boiler by no later than 5/31/96 and, thereafter, by no later than May 31 of every second year (1998, 2000, etc.). In each case, the source testing shall be performed in accordance with all applicable requirements specified in Chapter 139 of Article III of the Rules and Regulations of the Department of Environmental Resources while the boiler is being operated at its maximum capacity and the results of the testing shall be submitted to the Department in the form of a test report within 60 days of the performance of the testing. Additionally, a pre-test protocol or plan shall be submitted to the Department for evaluation at least 45 days in advance of test performance and the Department shall be given at least 14 days advance notice of the specific date upon which the testing is to be performed so that Department personnel can arrange to be present during testing.
- 12. The company shall maintain records in accordance with the recordkeeping requirements of 25 PA Code Section 129.95. Records shall be retained for at least 2 years and be made available to the Department upon request.
- 13. The volatile organic compound (VOC) emissions from all sources identified in condition 3 herein shall never exceed 49 tons per year (as determined by the Department).
- 14. This Operating Permit is issued for the operation of an anthracite culm-fired cogeneration facility and associated culm processing plant consisting of the 623.5 million Btu/hour Foster Wheeler brand

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15. Pursuant to the best available control technology provisions of 40 CFR 52.21 and the best available technology provisions of Chapter 127 of Article III of the Rules and Regulations of the Department of Environmental Resources, the air contaminant emissions from the anthracite culm-fired atmospheric circulating fluidized bed boiler shall meet the following limitations:

 nitrogen oxides (NOx) - .60 pounds/million BTU of heat input and 340 pounds/hour (24 hour average) PERMIT CONDITIONS

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COMPANY:

Foster Wheeler Mt. Carmel, Inc.

16. The circulating fluidized bed boiler shall only be fired on anthracite culm except that propane or natural gas may be used for startup purposes and as supplemental fuel. The 8.37 million Btu/hour propane-fired auxiliary boiler and 5 million Btu/hour propane-fired water vaporizer identified in condition 3 herein shall only be fired on propane or natural gas.

- 18. The company shall maintain and operate continuous emission monitoring systems on the fluidized hed boiler incorporated in the cogeneration plant in accordance with all applicable requirements specified in Chapters 123 and 139 of Article III of the Rules and Regulations of the Department of Environmental Resources, the Department's "Continuous Source Monitoring Manual" and 40 CFR Part 60. The company shall report the data generated by these systems in each calendar quarter to the Department in the format specified by the Department within 30 days following the end of the respective calendar quarter.
- 19. The company shall perform a System Performance/Relative Accuracy Test Audit on the continuous nitrogen oxides emission monitoring systems installed on the fluidized bed boiler by no later than 5/31/95 and, thereafter, by no later than May 31 of each subsequent year. Each of these audits shall be performed in accordance with all applicable requirements specified in Chapter 139 of Article III of the Rules and Regulations of the Department of Environmental Resources, the Department's "Continuous Source Monitoring Manual" and 40 CFR Part 60 and the

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results of each audit shall be submitted to the Department within 60 days of the performance of the audit. Additionally, the Department shall be given at least 14 days advance notice of the specific date upon which each audit is to be performed so that Department personnel can arrange to be present during audit performance.

The company shall perform such additional stack testing as may be requested by the Department in accordance with such schedule as is specified by the Department.

- 23. The company shall provide such culm and/or limestone analyses, or samples, as the Department may request.
- 24. The company shall maintain comprehensive records of cogeneration facility electric generation rate, steam flow, culm feed rate, limestone injection rate and other pertinent operating parameters and shall make this data available to the Department upon request. Records need not be retained beyond 2 years.