# COMMONWEALTH OF PENNSYLVA DEPARTMENT OF ENVIRONMENTAL RESOURCES FIELD OPERATIONS - AIR QUALITY CONTROL

#### OPERATING PERMIT

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, 2.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	oOP-46-0045	Facility NOx RACT Source(s) One Combustion Turbine	
Owner	PECO Energy Campany	Air	
Address	2301 Market Street, Box 8699	Cleaning	
	Philadelphia, PA 19101	Device	
Attention	n _ William F. McElrey	Location 300 Front Street	
	Director Environmental Affairs	West Conshohocken	
		Montgomery County	
1.	That the source(s) and any associated  a. operated in such a manner as not operated and maintained in a manner maintenance practices.		
2.	This permit is valid only for the specabove.	cific equipment, location and owner named	
	(SEE THE ATTACHED A	DITIONAL CONDITIONS)	
Violation Departmen	of this or any other provision of Art	this permit is a violation of Section 12 icle III of the rules and regulations of lt in suspension or revocation of this period of the control Act.	the

cc: Central Office

Southeast Regional Office

Expires MARCH 31, 2000

Joseph AV Feola

Air Pollution Control Manager

# Operating Permit Conditions Permit No. OP-46-0045 PECO Energy Company

# Conditions (continued):

- 3. This operating permit is issued to PECO Energy Company for the operation of General Electric (GE) combustion turbine Model MS 3002, and to specify Reasonably Available Control Technology (RACT) for Nitrogen Oxides (NOX) emissions under 25 PA Code §129.91 through 129.95.
- 4. The expiration date shown on the Operating Permit OP-46-0045 is for state purposes. For Federal Enforcement purposes the Operating Permit shall remain in effect as part of the State Implemenetation Plan (SIP) until replaced pursuant to 40 CFR 51 and approved by the US Environmental Protection Agency (EPA). The Operating Permit shall become enforceable by the US EPA upon its approval of the above as a revision to the SIP.
- 5. The combustion turbine is to be fired on natural gas only.

## 6. Capacity Factor Limitations:

The capacity factor as defined for this combustion turbine is the ratio of total heat input as fuel consumption for the last twelve (12) months to the maximum capability for the same last twelve (12) months for the source.

A rolling 12 month capacity factor is expressed as:

Last 12 months fuel consumption (cu.ft.) x the heat content of the fuel (BTU/cu.ft.)

77 million Btu/hr x 24 hours x No. of days in last 12 months day

The 12 month rolling capacity factor of the combustion turbine shall not exceed 50%.

#### 7. Emission limitations:

- a. The NOx emissions from this combustion turbine shall not exceed 170 ppm at 15%02 or 0.62 lb/MMBtu.
- b. The NOx emissions from this facility shall not exceed 48 lb/hr and 92 tons per year in a consecutive 12-month period.
- c. The VOC emissions from the facility shall not exceed a rate in tons per year in a consecutive 12-month period. The rate shall be determined from stack testing as required in Condition 8.
- d. The Department may establish more restrictive RACT emission limits based on stack testing results.

# Conditions (continued):

#### 8. Test Requirement:

- a. Within one hundred and eighty (180) days after the issuance of this Operating Permit or within 60 days of returning to service of this combustion turbine in 1995, PECO Energy Company must perform a stack test on the source covered by this Operating Permit in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department to demonstrate compliance with Condition 7 of this Operating Permit for NOx and VOC emissions. The stack test shall be performed while the aforementioned source is operating at 95% of the maximum rated capacity as stated on the application.
- b. At least thirty (30) days prior to the test, the Regional Air Pollution Control Engineer shall be informed of the date and time of the test.
- c. At least sixty (60) days prior to the test, the company shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
- d. Within thirty (30) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Air Pollution Control Manager for approval.

## 9. Recordkeeping:

- a. PECO Energy Company shall maintain certification from the fuel supplier of the type of fuel.
- b. PECO Energy Company shall keep a bound logbook for the turbine and record sufficient data and calculations to demonstrate that conditions 5 to 8 of this operating permit are met. The data shall include, at a minimum, the following:
  - (i) the date of operation;
  - (ii) Starting and ending time of the unit;
  - (iii) Monthly fuel consumption so that compliance with condition 6 can be determined.
- c. Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.
- d. The records shall be retained for at least 2 years and shall be made available to the Department upon request.
- e. Any additional data or records the Department may require to conform with 25 PA Code §129.95.

## Operating Permit Conditions Permit No. OP-46-0045 PBOO Energy Company

## Conditions (continued):

- 10. If at any time the Department has cause to believe that air contaminant emissions from the aforementioned source(s) may be in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Resources, the company shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s). Such testing shall be conducted in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Resources, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.
- 11. The company, within one hour of occurrence, shall notify the Department, at (610) 832-6242, of any malfunction of the source(s) or associated air cleaning device(s) which results in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Resources. A written report shall be submitted to the Department within two working days following the incident describing the malfunctions and corrective actions taken.
- 12. 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).

(46-GJC)

