

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FIELD OPERATIONS - BUREAU OF AIR QUALITY

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 Protection, the Department hereby issues this permit for the operation of the air contamination source(s) described below:

Permit No.	<u>OP-46-0045A</u>	Source(s)	<u>Facility NOx Emitting Sources</u>
Owner	<u>PECO Energy Company</u>	Air	<u></u>
Address	<u>300 Front Street</u>	Cleaning	<u></u>
	<u>West Conshohocken, PA 19428-2723</u>	Device	<u></u>
Attention	<u>Mr. Robert J. Gordon</u>	Location	<u>300 Front Street</u>
	<u>Manager, Plant Operations</u>		<u>West Conshohocken Borough</u>
			<u>Montgomery County</u>

This permit is subject to the following conditions:

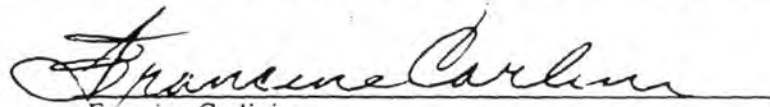
1. That the source(s) and any associated air cleaning devices are to be:
 - a. operated in such a manner as not to cause air pollution;
 - b. operated and maintained in a manner consistent with good operating and maintenance practices.
2. This permit is valid only for the specific equipment, location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

(SEE ADDITIONAL CONDITIONS ATTACHED)

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 Protection will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

Issued 12/04/1997

Expires 12/04/2002


Francine Carlini
Regional Manager
Air Quality

cc: Division of Permits, RCSOB
Administration
SEFO
Re 30 (GJC)170-2

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CONDITIONS (continued):

3. This operating permit is issued to the owner for the operation of the sources listed below and to specify Reasonably Available Control Technology (RACT) for Nitrogen Oxides (NOx) emissions from each source under 25 Pa. Code §§ 129.91 through 129.95:
 - A. A GE combustion turbine, model MS-3002, with a maximum capacity of 92 million Btu per hour firing natural gas only.
 - B. Two (2) preheaters, manufactured by BS&B, model CA300NSX, each rated at 3 million Btu per hour firing natural gas only.
 - C. Two (2) Emergency Generators, manufactured by Caterpillar, model G399, each rated at 7.8 million Btu per hour firing natural gas only.
 - D. Five (5) LNG vaporizers, manufactured by T-Thermal, model SUB-X, each rated at 42.8 million Btu per hour firing natural gas only.
4. The expiration date shown on the Operating Permit is for state purposes. For Federal enforcement purposes the RACT provisions of the Operating Permit shall remain in effect as part of the State Implementation Plan (SIP) until replaced pursuant to 40 CFR 51 and approved by the U.S. Environmental Protection Agency (EPA). The Operating Permit shall become enforceable by the U.S. EPA upon its approval of the above as a revision to the SIP.
5. This operating permit supersedes all previously issued operating permits and temporary operating permits bearing the number(s) OP-46-0045.
6. Operating Requirements for the Combustion Turbine
 - A. Capacity Factor Limitation:

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

A rolling 12 month capacity factor is expressed as:

$$\frac{\text{Last 12 months natural gas consumption (cu. ft./yr)} \times \text{natural gas heat content (Btu/cu. ft.)}}{92 \text{ million Btu/hr} \times 8760 \text{ hours/yr}}$$

The 12 month rolling capacity factor shall not exceed 80%.

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CONDITIONS (continued):

B. Emission limitations:

1. NOx emissions from this combustion turbine shall not exceed 77 ppmvd at 15% O₂, 0.283 lb/MMBtu, 26.04 pounds per hour, and 92 tons per year.
2. The operation of the combustion turbine shall not result in the emissions of visible air contaminants in excess of the limitations specified in Section 123.41, particulate matter in excess of the limitations specified in Section 123.13, all applicable sections of Chapter 123 of Article III of the Rules and Regulations of the Department of Environmental Protection, or in the emission of any of these or any other type of air contaminant in excess of the limitations specified in, or established pursuant to, any other applicable rule or regulation contained in Article III.

C. Monitoring and Recordkeeping Requirements:

- A. The owner shall record natural gas usage and its heat content on a monthly basis.
- B. Equipment (a rotameter or equivalent, as approved by the Department) shall be provided so that at the request of the Department the natural gas usage can be measured.

7. Operating Requirements for Sources in Conditions 3B and C:

- A. Each source shall be operated and maintained in accordance with manufacturer's specifications and good air pollution control practices.
- B. The operation of each emergency generator shall not exceed 500 hours in a consecutive 12-month period.
- C. A rotameter or equivalent shall be provided on each emergency generator so that at the request of the Department the operating hours can be measured.
- D. The owner shall record the operating hours for each emergency generator on a monthly basis.

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CONDITIONS (continued):

- E. The operation of the sources shall not result in the emissions of visible air contaminants in excess of the limitations specified in Section 123.41, particulate matter in excess of the limitations specified in Sections 123.11 and 123.13, all applicable sections of Chapter 123 of Article III of the Rules and Regulations of the Department of Environmental Protection, or in the emission of any of these or any other type of air contaminant in excess of the limitations specified in, or established pursuant to, any other applicable rule or regulation contained in Article III.
8. Operating Requirements for LNG Vaporizers
- A. The Company shall properly maintain the combustion units by following the steps listed below:
- (a) The Company shall conduct an annual adjustment or tune-up on the combustion unit. This adjustment shall include, but not limited to the following:
- (1) Inspection, adjustment, cleaning or replacement of fuel-burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
 - (2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO_x and to the extent practicable minimize emissions of CO.
 - (3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- (b) The company shall record each adjustment conducted under the procedures in paragraph (a) in a permanently bound log book or other method approved by the Department. This log shall contain, at a minimum, the following information:
- (1) The date of the tuning procedure.
 - (2) The name of the service company and technicians.
 - (3) The final operating rate or load.
 - (4) The final CO and NO_x emission rates.
 - (5) The final excess oxygen rate.

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CONDITIONS (continued):

- B. The owner shall keep necessary records in accordance with 25 Pa. Code Section 129.93(b)(4).

9. General

- A. Records required under this Operating Permit shall be kept for a period of two (2) years and shall be made available to the Department upon request.
- B. Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.
- C. Additional data or records the Department may request to confirm with 25 Pa. Code Section 129.95 shall also be maintained.
- D. 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 Protection, 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 Protection, 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.
- E. The company, within one hour of occurrence, shall notify the Department, at 610-832-6241, 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 Protection. A written report shall be submitted to the Department within two working days following the incident describing the malfunctions and corrective actions taken.
- F. 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 Protection) 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).

