

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

OPERATING PERMIT

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 described below.

Permit No: 34-2002 Source & Air  
Cleaning Device: Perulack/Leidy Compressor Station

Owner: Texas Eastern Transmission Corporation (See Attached)

Address: P.O. Box 1642  
Houston, TX 77251

Attention: Mr. Charles Wait Location: \_\_\_\_\_  
Supervisor, Environmental Compliance Lack Township  
Juniata County

This permit is subject to the following conditions:

1. That the source and any associated air cleaning devices 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 Reasonably Available Control technology (RACT) plan;
  - 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.
- 3.
- 4.

Issued: January 31, 1997

  
Program Manager

Southcentral Region 34-2002  
[PA, Region III]  
Permits

Texas Eastern Transmission Corporation

PERULACK/LEIDY COMPRESSOR STATION

Source, Continued

The Perulack/Leidy Compressor Station consists of the following sources:

Perulack

<u>Source</u>	<u>Company ID</u>	<u>Manufacturer/Model</u>	<u>Control Device</u>
Three 5,000 Hp Gas Turbines	31401 thru 31403	Dresser Clark/DC 990	None
19,800 Hp Gas Turbine	31404	General Electric/Frame 5 MS 5001 IAMD	None
445 Hp IC Engine	31435	Leroi/L 3460	None
486 Hp IC Engine	31436	Waukesha/L 3711	None

Leidy

4,785 Hp Gas Turbine	32701	Solar/Lentour H	None
One 1,100 Hp Supercharged IC Engine	31501	Cooper Bessemer/GMVA 8	Ignition Retard
Two 1,100 Hp Turbocharged IC Engines	31502 and 31503	Cooper Bessemer/GMVA 8	Precombustion Chamber
600 Hp IC Engine	32735	Caterpillar/3412	None

Conditions, Continued

- This operating permit is for the incorporation of the Department's NO<sub>x</sub> Reasonably Available Control Technology (RACT) requirements (25 Pa. Code, §§129.91 through 129.95) for the Perulack/Leidy Compressor Station.

## TEXAS EASTERN TRANSMISSION CORPORATION

PERULACK/LEIDY COMPRESSOR STATIONConditions, Continued

5. The gas turbines are subject to the following NO<sub>x</sub> emission standards when operating at normal conditions. Normal operating conditions are defined as +/-10 percent of the nameplate horsepower rating of the turbine.
  - a. Dresser Clark DC 990 - 150 ppmdv corrected to 15 percent O<sub>2</sub>
  - b. General Electric Frame 5 MS 5001 LAMD - 120 ppmdv corrected to 15 percent O<sub>2</sub>
  - c. Solar Centaur H - 100 ppmdv corrected to 15 percent O<sub>2</sub>
6. The Cooper Bessemer GHVA 8 IC engines are subject to the following NO<sub>x</sub> emission standards:
  - a. Engine 31501 - 27.3 lb/hr
  - b. Engines 31502 and 31503 - 7.3 lb/hr
7. The emission limits listed in Conditions Nos. 5 and 6 do not apply during the startup and shutdown of the gas turbines or IC engines. Startup and shutdown periods are limited to a maximum of one hour each.
8. Each of the emergency standby engines (Lerof L 3460, Waukesha L 3711 and Caterpillar 3412) shall be operated less than 500 hours during any consecutive 12-month period [25 Pa. Code, §129.93(c)(5)].
9. Verification of the NO<sub>x</sub> emission standards listed in Conditions Nos. 5 and 6 shall be conducted semiannually utilizing methodology outlined in 25 Pa. Code, Chapter 139 and the Department's Source Testing Manual or by other means approved by the Department. Based on the monthly records of fuel usage and operating hours, the Department reserves the right to decrease the verification frequency to an annual basis.
10. At least two weeks prior to the test program, the Program Manager shall be informed of the date and time of the tests.
11. Within 60 days after completion of the test programs, two copies of the test reports, including all operating conditions, shall be submitted to the Program Manager. Test results shall be reported as follows:
  - a. ppmdv
  - b. ppmdv corrected to 15 percent O<sub>2</sub> (turbines only)
  - c. gm/hp-hr (engines only)
  - d. lb/hr
  - e. lb/mm Btu of heat input
12. Records shall be maintained in accordance with 25 Pa. Code, §129.95 requirements.

TEXAS EASTERN TRANSMISSION CORPORATION

PIRULACK/LEIDY COMPRESSOR STATION

Conditions, Continued

13. An annual report containing monthly records of fuel usage and operating hours for the sources listed in this operating permit 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.
14. The three Dresser Clark DC 990 and the one Solar Centaur H gas turbines are subject to Subpart GG of the Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of this Subpart. 40 CFR, §60.4 requires submission of copies of all requests, reports, applications, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Director  
Air, Toxics and Radiation Division  
U.S. EPA, Region III  
841 Chestnut Street  
Philadelphia, PA 19107
15. The sum total of NO<sub>x</sub> emissions from the Solar Centaur H gas turbine and the three Cooper Bessemer GMVA B IC engines shall not exceed 256 tons per year.