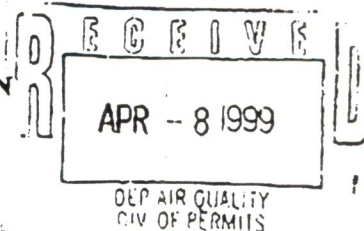


COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR QUALITY



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 and 129 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.

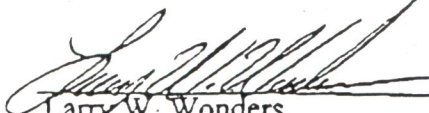
Permit No.:	OP-43-0272	Source(s):	14 Engines, 1 Boiler, 4 Heaters, 1 Furnace .3 Auxiliary Engines
Owner:	Tennessee Gas Pipeline	Air Cleaning Device(s):	Low Emission Combustion, Ignition Timing Retard
Address:	1010 Milam Street P.O. Box 2511 Houston, TX 77251	Location:	Station 219 Mercer, Mercer Co.
Attention:	Douglas M. Jordan, Principal Environmental Scientist		

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 exceed the emission limitations specified in this Operating Permit;
 - 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.

Failure to comply with the conditions placed on this permit is a violation of 25 Pa. Code 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: April 7, 1999


Larry W. Wonders
Regional Air Quality Program Manager

Permit Conditions
Permit No: OP-43-0272
Company: Tennessee Gas Pipeline Company

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 Sections 129.91 through 129.95 for the following sources:

- * Six (6) Cooper-Bessemer GMV-10TF engines, each rated at 1100 brake horsepower and 300 RPM speed (the nitrogen oxides emissions from which shall be controlled by retarding ignition timing to 6 degree before top dead center)
- * Two (2) Cooper-Bessemer GMV 10TFS engines, each rated at 1350 brake horsepower and 300 RPM speed (the nitrogen oxides emissions from which shall be controlled by low emission combustion retrofit kits)
- * Five (5) Cooper-Bessemer GMV10 engines, each rated at 1350 brake horsepower and 300 RPM speed) (the nitrogen oxides emissions from which shall be controlled by retarding ignition timing to 8 degree before top dead center)
- * One (1) Cooper-Bessemer 16V-250 engine, rated at 5500 brake horsepower and 250 RPM speed (the nitrogen oxides emissions from which shall be controlled by low emission combustion retrofit kits)
- * Three (3) auxiliary engines rated at 408 brake horsepower
- * One (1) office and utility furnace rated at 0.15 MMBtu/hr heat input
- * One (1) 1.5 MMBtu/hr boiler
- * Four (4) small heaters, each rated at less than or equal to 40,000 Btu/hr heat input

5. Pursuant to the RACT provisions of Sections 129.91 through 129.95 of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection, the nitrogen oxides (NOx, expressed as NO2) emissions from each of the following Cooper-Bessemer engines identified in Condition 3 herein shall not exceed the following limitations:

<u>Engine</u>	<u>NOx</u> <u>pounds per hour</u>
Six GMV-IOTF	31.6
Two GMV-IOTFS	11.9
Five GMVA-10	33.3
One 16V-250	48.5

Permit Conditions
Permit No: OP-43-0272
Company: Tennessee Gas Pipeline Company

7. Pursuant to the RACT provisions of Sections 129.91 through 129.95 of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection, the six Cooper-Bessemer GMV-IOTF engines identified in Condition 3 herein shall be set and maintained with an ignition timing of 6 degrees before top dead center, which corresponds to a 3 degree retard from a standard ignition timing of 9 degrees before top dead center. The five Cooper-Bessemer GMV10 engines identified in Condition 3 herein shall be set and maintained with an ignition timing of 8 degrees before top dead center, which corresponds to a 4 degree retard from a standard ignition timing of 12 degrees before top dead center. These engines shall also be operated and maintained in accordance with good air pollution control practices.
8. Pursuant to 25 PA Code Section 129.93 (c) (1) of the RACT requirements, RACT for one boiler, four furnaces and heaters listed in Condition 3 shall be installation, maintenance, and operation in accordance with manufacturer's specifications. These sources shall also be operated and maintained in accordance with good air pollution control practices.
9. Pursuant to 25 PA Code Section 129.93 (c) (3) of the RACT requirements, RACT for three auxiliary engines listed in Condition 3 shall be set and maintained at 4 degree retarded before top dead center relative to standard ignition timing. These engines shall be maintained and operated in accordance with manufacturer's specifications and with good air pollution control practices.
10. Pursuant to the RACT provisions of Sections 129.91 through 129.95 of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection, the volatile organic compounds (VOC) emissions from one 16-V250 Cooper-Bessemer engine identified in Condition 3 herein shall not exceed 6 lbs per hour and 26.3 tons per year calculated on a 12-month rolling basis.
11. Pursuant to 25 PA Code Sections 129.91 through 129.95, the VOC RACT for all sources listed in Condition 3 shall be operated and maintained in accordance with good air pollution control practices.
12. The company shall perform semi-annual NOx tests upon each of the six (6) Cooper-Bessemer GMV-10TF engines, two (2) Cooper-Bessemer GMV10TFS engines, five (5) Cooper-Bessemer GMV10 engines, and one (1) Cooper-Bessemer 16V-250 engine identified in Condition 3 herein using a portable exhaust gas analyzer which has been approved by the Department. The results from these tests shall be used to demonstrate compliance with NOx emissions limits established in Condition 5.