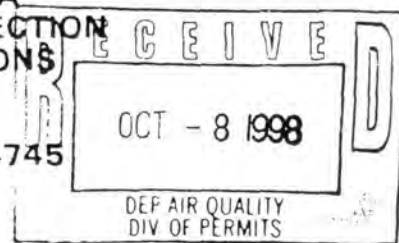


COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHWEST REGION - FIELD OPERATIONS
AIR QUALITY
400 WATERFRONT DRIVE
PITTSBURGH, PENNSYLVANIA 15222-4745



OPERATING PERMIT

In accordance with provisions of the Air Pollution Control 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.: 32-000-200

Source : Cogeneration Facility

Owner : Indiana University of Pennsylvania

Air Cleaning Devices : Cleanburn Combustion Technology

Address : 425 Pratt Drive
Indiana, PA 15705

Attention : Charles B. Altimus
Operations Manager

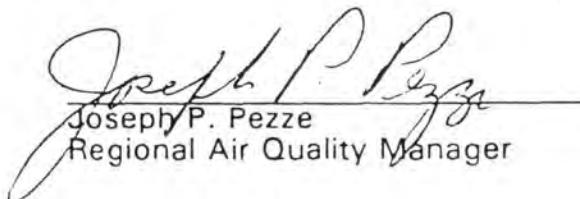
Plant: S. W. Jack Cogeneration Plant
Location: IndianaBorough
County: Indiana

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 plan approval issued under the same number;
 - (c) operated and maintained in a manner consistent with good operating and management practices.
2. This permit is valid only for the specific equipment, location and owner named above.
3. See 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: 09/24/98


Joseph P. Pezze
Regional Air Quality Manager

PERMIT TERM 9/24/98 - 9/24/03

Indiana University of Pennsylvania
RACT Operating Permit: 32-000-200

Special Conditions

3. This RACT Operating Permit is for the operation of Cooper-Bessemer's Gas/Diesel CLEANBURN Combustion Technology, on the four (4) reciprocating engines, two natural gas fired boilers (main auxiliaries), and two coal-fired boilers (reserve) at the IUP, S.W. Jack Cogeneration Facility located in Indiana Borough, Indiana County.
4. The two coal fired boilers and the two natural gas fired boilers (main auxiliaries) shall perform annual maintenance (adjustment) or tune-up in accordance with 25 PA Code 129.93 (b)(2) and (3).
- ~~5. These two coal fired boilers shall be classified as auxiliary combustion units, and have an operational limit of 720 hrs/yr per each source.~~
6. All of the boilers should be operated and maintained in accordance with good air pollution practices.

- ~~7. Emission limits for the four (4) Cooper-Bessemer's Gas/Diesel reciprocating internal combustion engines at this facility are as follows and based on a 12-month rolling basis:~~

	<u>NOX (TPY)</u>	<u>VOC (TPY)</u>
Engine #1	146.0	57.7
Engine #2	146.0	57.7
Engine #3	146.0	57.7
Engine #4	146.0	57.7

8. The emissions from each of the four (4) Cooper-Bessemer's Gas/Diesel reciprocating Internal combustion engines shall not exceed 1.9 grams of NOX per brake horsepower and 0.75 grams of VOC per brake horsepower when operating at dual fuels (99% natural gas and 1% diesel fuel) or 100% natural gas.
9. Records shall be kept to verify compliance from the operator's restrictions specified in Condition #7 and #8 above. These records shall include: hours of operation and fuel characteristics. These records shall be kept and maintained for 5 years.

- ~~10. Each of the four internal combustion engines may be operated utilizing diesel fuel for a maximum of 500 hours in any consecutive 12-month period during emergencies, maintenance, and periodic start-ups.~~
11. While these engines are operating with diesel fuel the pounds per hour for oxides of nitrogen as (NO₂) shall not exceed 163.51 lbs/hr of No_x per each engine.
- ~~12. The Department may revise the allowable emission rates based on existing stack test data and additional data to be gathered semi-annually over the next two (2) years utilizing a portable analyzer.~~
13. The applicant shall perform stack testing by a qualified testing firm on all four (4) reciprocating engines. Within the term of the operating permit stack tests shall be performed to determine the emission rates and grams/brake horsepower for oxides of nitrogen (as NO₂), carbon monoxide (CO), and VOC as Non-Methane Hydrocarbons. Testing shall be conducted while engines are operating at full load and full speed during the ozone season (April to October).
14. The applicant shall test semi-annually each of the four engines and two natural gas fired boilers at this Cogeneration Facility using a portable analyzer. The applicant shall submit a complete operating procedure for the portable analyzer, including calibration, QA/QC, and emissions calculation methods. Results from semi-annual stack tests conducted with portable analyzers shall be retained on site, and be made available to the Department upon request.
15. Stack testing shall be performed in accordance with 25 PA. Code Chapter 139 regulations and the Department's Source Testing Manual.
16. Two copies of a pre-test protocol shall be submitted to the Department for review at least 60 days prior to the performance of the stack test.
17. Two copies of the stack test results shall be supplied to the Department for review within 60 days of completion of testing.
18. The Department shall be notified at least two weeks in advance of the date and time of the stack test so that an observer may be present.

19. The company shall maintain records in accordance with the minimum record keeping requirements of 25 PA Code Section 129.95.

- (1) The records shall provide sufficient data to clearly demonstrate of PA Code Sections 129.91 - .94 are met.
- (2) Records shall be retained for at least two years and shall be made available to the Department on request.

~~20. Operational limits for the four (4) Cooper-Bessemer's Gas/Diesel reciprocating internal combustion engines at this facility shall be 8,400 hours per year per engine.~~

~~21. Reductions in the allowable emission rates below the levels established herein shall not be available as ERCs (Emission Reduction Credits) pursuant to 25 PA Code 127.206 unless the reductions are achieved through real reductions of actual or allowable emissions, whichever is lower, through the installation of controls beyond those required by RACT or any other subsequent regulatory requirement.~~

~~22. This operating permit is valid for a limited time only and may be renewed pursuant to 25 PA. Code 127.446 before its expiration. An application for an operating permit renewal shall be submitted at least six and not more than 18 months before expiration of the existing permit. The application must be complete and accompanied by the permit fees required by Subchapter 1 of 25 PA. Code, Chapter 127. The source may not be operated without a valid operating permit. Operation of the source without an appropriate permit from the Department may subject the company to enforcement action.~~