

CITY OF PHILADELPHIA DEPARTMENT OF PUBLIC HEALTH AIR MANAGEMENT SERVICES RACT PLAN APPROVAL

Effective Date: January 9, 2015 Expiration Date: None Replaces Permit No. None

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 a Reasonably Available Control Technology (RACT) proposal received under the Pennsylvania Code, Title 25, Chapter 129.91 thru 129.95, of the rules and regulations of the Pennsylvania Department of Environmental Protection (PADEP), Air Management Services (AMS) approved the RACT proposal of the Facility below for the source(s) listed in section 1.A. Emission Sources of the attached RACT Plan Approval.

Facility:	Temple University – Main Campus
<u>Owner:</u> Location:	Temple University Broad Street and Montgomery Avenue, Philadelphia, PA 19122
<u>Mailing Address:</u> <u>SIC Code(s):</u> <u>Plant ID:</u>	1009 West Montgomery Ave, Philadelphia, PA 19122 8221 08905
Facility Contact: Phone:	Kurt A. Bresser (215) 204-4515
<u>Permit Contact:</u> <u>Phone:</u>	Kurt A. Bresser (215) 204-4515
<u>Responsible</u> Official:	Robert Siegfried
<u>Title:</u>	Associate Vice President, Facilities Management

1/9/2015

Edward Wiener, Chief of Source Registration

Date

The RACT plan approval is subject to the following conditions:

1) The purpose of this plan approval is to establish Nitrogen oxide and (NOx) Reasonably available control technology (RACT) for Temple University, Main Campus. This includes the following emission source and control equipment.

A. Emission Sources

- (i) BMCEP Boiler #1: Victory Energy Models VS-4-68, a natural gas heat input rating of 91.3 MMBTU/Hr and a #2 fuel oil heat input rating of 86.8 MMBTU/Hr.
- (ii) BMCEP Boiler #2: Victory Energy Models VS-4-68, a natural gas heat input rating of 91.3 MMBTU/Hr and a #2 fuel oil heat input rating of 86.8 MMBTU/Hr.
- (iii)BMCEP Boiler #3: Victory Energy Models VS-4-68, a natural gas heat input rating of 91.3 MMBTU/Hr and a #2 fuel oil heat input rating of 86.8 MMBTU/Hr.
- (iv) Ten (10) Standby Generators, Caterpillar 3516 Tandem engine, 2250 Hp each, burning natural gas.

2) Control equipment

(i) Each boiler shall be installed with low NOx burners and flue gas recirculation.

3) **Emission limits**

- A. Boilers
 - (i) Nitrogen Oxides (NO_x) emissions from the three boilers combined shall not exceed 15.5 tons per rolling twelve month period.
 - (ii) NOx emissions from each boiler shall not exceed the following:
 - (a) 0.036 lbs/MMBTU for while burning natural gas, and
 - (b) 0.110 lbs/MMBTU for while burning No.2 oil.

B. Standby Electric Generators

- (i) NOx emission from each standby electric generator shall be less than or equal to 2.00 g/bhp-hr;
- (ii) Each Standby Electric Generator shall operate at a maximum of 500 hours per rolling 12month period
- (iii)The Combined NOx hourly emission rate shall be less than or equal to 99 lb/hr

4) Work practice standard

- A. Standby Electric Generators
 - (i) Each Standby Electric Generating Facility shall operate at a maximum of 500 hours per rolling 12-month period

5) Testing Requirements

- A. Boilers
 - (i) The Permittee shall perform stack testing on each BMCEP Boiler every five years
- B. Standby Electric generators
 - (i) Temple Main shall conduct quarterly NOx portable analyzer test on each engine using AMS-approved procedure.

6) Monitoring, Recordkeeping and Reporting Requirements

- A. Temple shall monitor and record the following
 - (i) The combined boiler NOx emission per rolling 12-month period calculated monthly to demonstrate compliance with the above NOx emission limits.
 - (ii) Stack test result for each boiler

- (iii)Operating hours for each Standby Electric Generator per rolling twelve month period calculated monthly
- (iv)Portable analyzer test results for each engine
- B. Temple University shall maintain a file containing all the records and data that are required to be collected to demonstrate compliance with NOx RACT requirement of 25 PA Code §129.91-129.94
- C. Records shall be retained for at least five years and shall be made available to AMS on request.
- D. The company shall not impose conditions upon or otherwise restrict AMS's access to the aforementioned source(s) and/or any associated air cleaning device(s) and shall allow AMS to have access at any time to said source(s) and associated air cleaning device(s) with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act.
- E. Revisions to any emission limitations incorporated in this RACT Approval will require resubmission as revision to the PA State Implementation Plan. The applicant shall bear the cost of public hearing and notification required for EPA approval as stipulated in 25 PA Code §129.91(h)

7) **RACT Implementation Schedule**

A. Upon issuance of this approval Temple University – Main Campus shall begin immediate implementation of the measures necessary to comply with the approved RACT proposal.