



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY VALLEY REGIONAL OFFICE

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Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

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EXECUTIVE COMPLIANCE AGREEMENT UNIVERSITY OF VIRGINIA FOR Main Heating Plant Registration No.: 40200

This is an Executive Compliance Agreement (Agreement) between the University of Virginia (UVA) and the Virginia Department of Environmental Quality (DEQ) pursuant to the Director's authority, as set forth in §§ 10.1-1185, -1192, -1309 and -1316 of the Code of Virginia (Va. Code), to administer and enforce the State Air Pollution Control Law and regulations.

UVA, a public educational institution located in Charlottesville, Virginia, owns and operates the Main Heating Plant, located at Jefferson Park Avenue in Charlottesville, Virginia (Facility). The Facility is subject to the February 2, 2018 Title V Operating Permit (Permit), and includes five boilers (1R, 2R, 3R, 4R, and 5) to produce steam for heat and related university operations. Pursuant to § 23.1-2200 of the Code of Virginia, the Rector and Visitors of UVA are vested with the authority to govern UVA. Nothing in this Agreement shall operate to limit such authority of the Rector and Visitors or otherwise violate the laws of the Commonwealth.

1. On December 11, 2018, DEQ reviewed UVA's Semi Annual Report for Boilers 1R, 3R, 4R, and 5, dated July 30, 2018. The report documented 21 emissions exceedances of the 30-day rolling average of nitrogen oxides for Boiler 5 while operating on natural gas between January 1, 2018 and May 25, 2018. Reported exceedances ranged from 0.037 lb/MMBTU to 0.052 lb/MMBTU.

Permit Condition 16 of the Permit requires that the short-term emissions of nitrogen oxides from Boiler 5 (Ref.7103-1-05) shall not exceed 0.036 lbs/MMBTU when utilizing natural gas as fuel, calculated as a 30-day rolling average.

2. On December 11, 2018, DEQ reviewed UVA's Semi-Annual Monitoring/Compliance Assurance Monitoring Report (SAMR), dated August 28, 2018. The SAMR documented the following:

- a. One exceedance of the short-term (lb/hr) emissions limit for carbon monoxide for Boiler 5 while operating on coal on January 20, 2018, and three exceedances of the short-term (lbs/hr) emission limit for carbon monoxide for Boiler 5 while operating on natural gas from April 16, 2018 to April 18, 2018. The reported exceedance while operating on coal was 25.7 lbs/hr and the reported exceedances while operating on natural gas ranged from 10.0 lbs/hr to 62.8 lbs/hr.

Condition 16 of the Permit requires that short-term emissions of carbon monoxide from Boiler 5 (Ref. 7103-1-05) shall not exceed 23.63 lbs/hr when utilizing coal, and shall not exceed 9.26 lbs/hr when utilizing natural gas.

- b. One exceedance of the short-term (lbs/hr) emissions limit for carbon monoxide for Boiler 2R while operating on coal on February 3, 2018. The reported exceedance was 26.1 lb/hr.

Condition 13 of the Permit requires that short-term emissions of carbon monoxide from Boiler 2R (Ref. 7103-1-02R) shall not exceed 19.96 lbs/hr when utilizing coal.

- c. Two exceedances of the short-term (lbs/hr) emission limits for PM/PM10 for Boiler 1R while operating on coal on January 16, 2018 and April 3, 2018. The reported exceedances were 1.91 lbs/hr and 2.07 lbs/hr, respectively.

Condition 12 of the Permit requires that short-term emissions of PM and PM10 from Boiler 1R (Ref. 7103-1-01R) shall each not exceed 1.90 lbs/hr when utilizing coal.

- d. The results of visible emissions inspections conducted on January 23, 2018, February 19, 2018, and March 12, 2018 were not documented in the SAMR.

Condition 91 of the Permit states: "The permittee shall conduct visible emission inspections on each boiler stack listed in Condition 88 in accordance with the following procedures and frequencies... [and] all observations and VEE results shall be recorded."

Condition 94 of the permit states: "The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with

alternative method, the short-term (lbs/hr) emissions for PM/PM10 from Boiler 1R while operating on coal on January 16, 2018 and April 3, 2018 were calculated as 1.90 lbs/hr and 1.73 lbs/hr, respectively, and do not exceed emissions limits. On March 20, 2019, DEQ staff confirmed that this alternative method is acceptable.

- d. Documentation from UVA's computerized maintenance monitoring systems was provided, confirming that visible emissions testing were conducted during the first quarter of 2018 for KCRC boiler (Ref. 1600-1-01). This boiler was removed from service in March 2018 and the building it served has been demolished.
- e. Documentation was provided confirming that the permissions for disabling emergency generator operation alarms has been elevated to only the UVA Systems Control Center and appropriate administrators to avoid future accidental operation of the emergency generator.

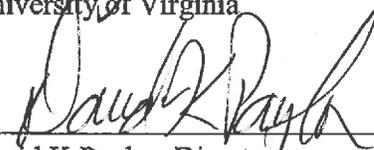
Accordingly, UVA and DEQ have agreed upon a schedule for corrective actions which is included in this Agreement as Appendix A.

This Agreement shall become effective upon the date of its execution by the Director of the Department of Environmental Quality or his designee. UVA agrees to be bound by any compliance dates in this Agreement that may predate its effective date.



James E. Ryan, President
University of Virginia

4/30/19
Date



David K. Paylor, Director
Department of Environmental Quality

5/17/2019
Date

**APPENDIX A
SCHEDULE OF COMPLIANCE**

University of Virginia agrees to:

1. **Within 90 days of the effective date of this Agreement, UVA shall:**
 - a. submit to DEQ a complete application to modify the Permit to change the averaging period for carbon monoxide emissions to a 30-day rolling average for Boilers 1R, 2R, and 5; **or**
 - b. submit an alternative corrective action plan for DEQ approval that will result in sustained compliance with the short-term emissions limits of carbon monoxide specified in the Permit from Boilers 1R, 2R and 5 within 180 days from the date of plan submittal.

Unless otherwise specified, correspondence required by this Agreement shall be submitted to:

Tamara Ambler
Enforcement Specialist Senior
VA DEQ –VRO
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